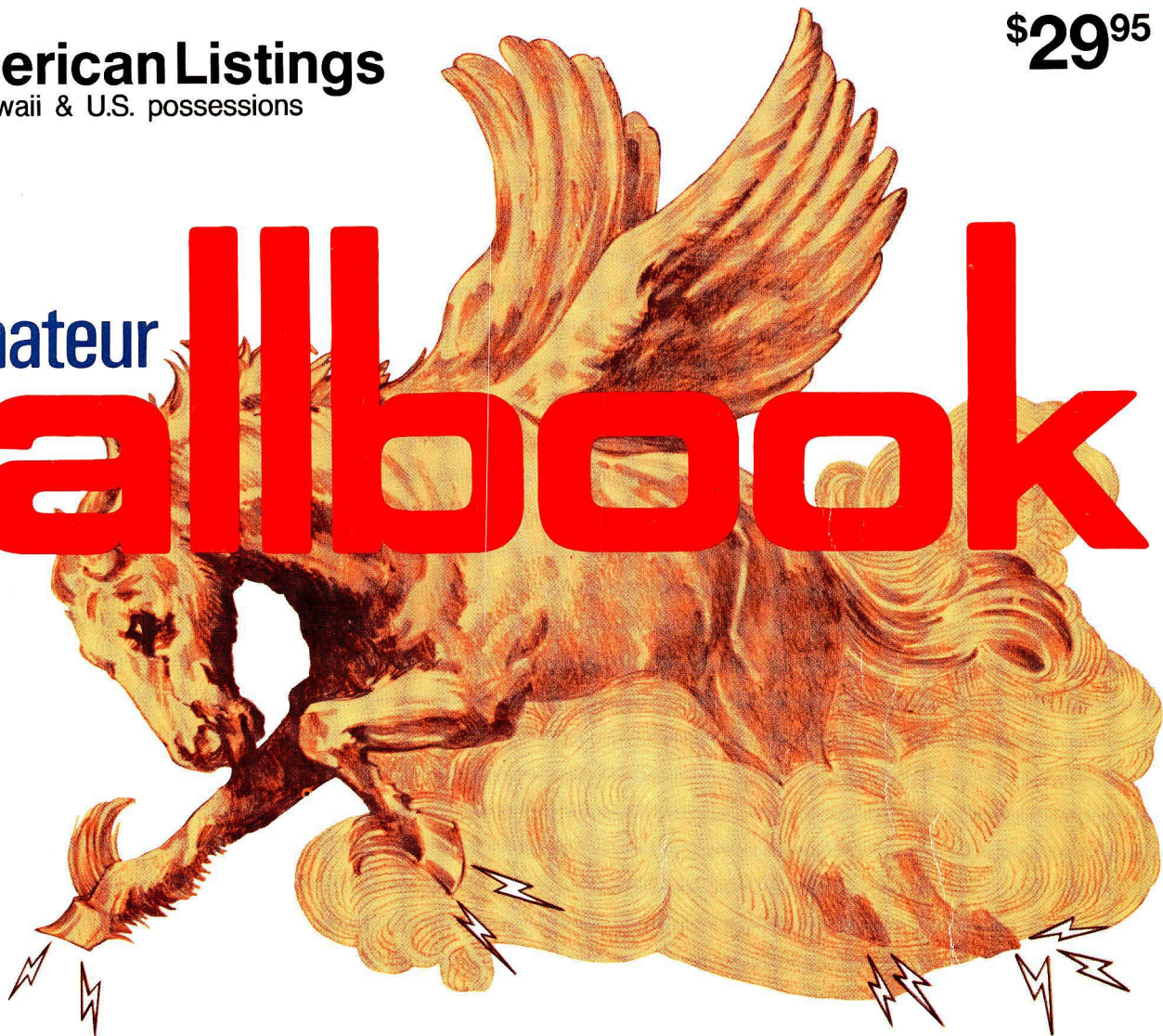


**North American Listings**  
including Hawaii & U.S. possessions

**\$29<sup>95</sup>**

# **1993** **radio amateur** **callbook**



**The only publication listing licensed radio amateurs throughout the world, since 1920.**

**in this issue**

- 575,146 licensed Radio Amateurs
- 48,700 new licenses included, issued since the 1992 edition
- Over 83,000 changes in listings
- Then & Now — Call letter changes
- 6 and 10 Meter Beacon Lists
- Radio Amateur Prefixes of the World
- Table of Call Sign Allocations
- DXCC Countries List
- Census of Amateur Radio Licenses of the World
- Census of Amateur Radio Licenses of the U.S.
- Radio Amateurs Operating with Reciprocal Licenses
- World Wide QSL Bureaus
- Plus many other features

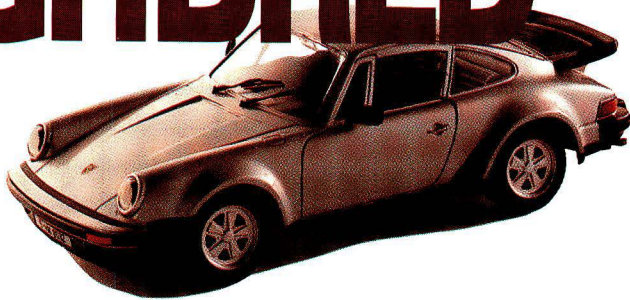
**71st Anniversary Edition**

For Use Throughout 1993

**NEW!**



# THOROUGHbred STYLE



*Kenwood—the hallmark of quality in mobile communications*

## TM-741A FM Multibander

For genuine flexibility and pole-position performance, look to Kenwood's TM-741A. Offering 144MHz/440MHz dual-band capability—plus the option of adding one of 4 additional FM units (28MHz, 50MHz, 220MHz, & 1200MHz) for tri-band operation—this compact rig is ready for any challenge.

Features include dual/triple receive, 101 memory channels per band, multiple scan modes, and a removable front panel—specially illuminated for optimum nighttime visibility.

## TM-732A FM Dual Bander

Another star in the fast-moving world of mobile communications is Kenwood's TM-732A. Offering 144MHz/440MHz dual-band operation with dual receive (including VHF+VHF and UHF+UHF), this compact FM transceiver comes with built-in DTSS and pager functions, automatic band change, a detachable front panel, and a multi-function microphone to facilitate on-the-move operation.



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6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

**KENWOOD**  
...pacesetter in Amateur Radio

## RADIO AMATEURS of NORTH AMERICA

VOLUME 71  
NUMBER 1

Including Hawaii and  
the U.S. Possessions

1993

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Any errors should be immediately called to the Company's attention.

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As Issued by the International Telecommunications Union and Others

AAA-ALZ	United States of America	OKA-OMZ	Czechoslovakia	YZA-YZZ	Yugoslavia	9BA-9DZ	Iran
AMA-AOZ	Spain	ONA-OTZ	Belgium	ZAA-ZAZ	Ablania	9EA-9FZ	Ethiopia
APA-ASZ	Pakistan	OUA-OZZ	Denmark	ZBA-ZJZ	Great Britain & No. Ireland	9GA-9GZ	Ghana
ATA-AWZ	India			ZKA-ZMZ	New Zealand	9HA-9HZ	Malta
AXA-AXZ	Australia	PAA-PIZ	Netherlands	ZNA-ZOZ	Great Britain & No. Ireland	9IA-9JZ	Zambia
AYA-AZZ	Argentina	PJA-PJZ	Netherlands Antilles	ZPA-ZPZ	Paraguay	9KA-9KZ	Kuwait
		PKA-POZ	Indonesia	ZQA-ZQZ	Great Britain & No. Ireland	9LA-9LZ	Sierra Leone
		PPA-PYZ	Brazil	ZRA-ZUZ	South Africa-Namibia	9MA-9MZ	Malaysia
		PZA-PZZ	Surinam	ZVA-ZZZ	Brazil	9NA-9NZ	Nepal
BAA-BZZ	China					9OA-9TZ	Zaire
CAA-CEZ	Chile	QAA-QZZ	Q Signals	2AA-2ZZ	Great Britain & No. Ireland	9UA-9UZ	Burundi
CFA-CKZ	Canada			3AA-3AZ	Monaco	9VA-9VZ	Singapore
CLA-CMZ	Cuba	RAA-REZ	Commonwealth of Independent States	3BA-3BZ	Mauritius	9WA-9WZ	Malaysia
CNA-CNZ	Morocco	RFA-RFZ	Georgia	3CA-3CZ	Equatorial Guinea	9XA-9XZ	Rwanda
COA-COZ	Cuba	RGA-RZZ	Commonwealth of Independent States	3DA-3DM	Swaziland	9YA-9ZZ	Trinidad and Tobago
CPA-CPZ	Bolivia			3DN-3DZ	Fiji	A2A-A2Z	Botswana
CQA-CUZ	Portugal	SAA-SMZ	Sweden	3EA-3FZ	Panama	A3A-A3Z	Tonga
CVA-CXZ	Uruguay	SNA-SRZ	Poland	3GA-3GZ	Chile	A4A-A4Z	Oman
CYA-CZZ	Canada	SSA-SSM	Egypt	3HA-3UZ	China	A5A-A5Z	Bhutan
DAA-DRZ	Fed. Rep. of Germany	SSN-STZ	Sudan	3VA-3VZ	Tunisia	A6A-A6Z	United Arab Emirates
DSA-DTZ	South Korea	SUA-SUZ	Egypt	3WA-3WZ	Vietnam	A7A-A7Z	Qatar
DUA-DZZ	Philippines	SVA-SZZ	Greece	3XA-3XZ	Guinea	A8A-A8Z	Liberia
EAA-EHZ	Spain			3YA-3YZ	Norway	A9A-A9Z	Bahrain
EIA-EJZ	Ireland	TAA-TCZ	Turkey	3ZA-3ZZ	Poland	C2A-C2Z	Nauru
EKA-EKZ	Commonwealth of Independent States	TDA-TDZ	Guatemala	4AA-4CZ	Mexico	C3A-C3Z	Andorra
ELA-ELZ	Liberia	TEA-TEZ	Costa Rica	4DA-4IZ	Philippines	C4A-C4Z	Cyprus
EMA-EQZ	Commonwealth of Independent States	TFA-TFZ	Iceland	4JA-4LZ	Commonwealth of Independent States	C5A-C5Z	The Gambia
EPA-EQZ	Iran	TGA-TGZ	Guatemala	4MA-4MZ	Venezuela	C6A-C6Z	Bahamas
ERA-ERZ	Commonwealth of Independent States	THA-THZ	France	4NA-4OZ	Yugoslavia	C7A-C7Z	World Meteorological Organization
ESA-ESZ	Estonia	TIA-TIZ	Costa Rica	4PA-4SZ	Sri Lanka	C8A-C9Z	Mozambique
ETA-ETZ	Ethiopia	TJA-TJZ	Cameroon	4TA-4TZ	Peru	D2A-D3Z	Angola
EUA-EWZ	Belarus, CIS	TKA-TKZ	France	4UA-4UZ	United Nations	D4A-D4Z	Cape Verde
EXA-EZZ	Commonwealth of Independent States	TLA-TLZ	Central African Republic	4VA-4VZ	Haiti	D5A-D5Z	Liberia
		TMA-TMZ	France	4WA-4WZ	North Yemen	D6A-D6Z	Comoros
		TNA-TNZ	Congo	4XA-4XZ	Israel	D7A-D9Z	South Korea
		TOA-TQZ	France	4YA-4YZ	Intl. Civil Aviation Org.	E2A-E2Z	Thailand
FAA-FZZ	France	TRA-TRZ	Gabon	4ZA-4ZZ	Israel	H2A-H2Z	Cyprus
		TSA-TSZ	Tunisia	5AA-5AZ	Libya	H3A-H3Z	Panama
		TTA-TTZ	Chad	5BA-5BZ	Cyprus	H4A-H4Z	Solomon Is.
GAA-GZZ	Great Britain & No. Ireland	TUA-TUZ	Ivory Coast	5CA-5GZ	Morocco	H6A-H7Z	Nicaragua
HAA-HAZ	Hungary	TVA-TXZ	France	5HA-5IZ	Tanzania	H8A-H9Z	Panama
HBA-HBZ	Switzerland	TYA-TYZ	Benin	5JA-5KZ	Colombia	J2A-J2Z	Djibouti
HCA-HDZ	Ecuador	TZA-TZZ	Mali	5LA-5MZ	Liberia	J3A-J3Z	Grenada
HEA-HEZ	Switzerland	UAA-UEZ	Commonwealth of Independent States	5NA-5OZ	Nigeria	J4A-J4Z	Greece
HFA-HFZ	Poland	UFA-UFZ	Georgia	5PA-5QZ	Denmark	J5A-J5Z	Guinea Bissau
HGA-HGZ	Hungary	UGA-UQZ	Commonwealth of Independent States	5RA-5SZ	Madagascar	J6A-J6Z	St. Lucia
HHA-HHZ	Haiti	URA-UTZ	Ukraine, CIS	5TA-5TZ	Mauritania	J7A-J7Z	Dominica
HIA-HIZ	Dominican Republic	UUA-UZZ	Commonwealth of Independent States	5UA-5UZ	Niger	J8A-J8Z	St. Vincent and the Grenadines
HJA-HKZ	Colombia	VAA-VGZ	Canada	5VA-5VZ	Togo	L2A-L9Z	Argentina
HLA-HLZ	Rep. of Korea (South)	VHA-VNZ	Australia	5WA-5WZ	Western Samoa	P2A-P2Z	Papua New Guinea
HMA-HMZ	Dem. People's Rep. of Korea (North)	VOA-VOZ	Canada	6AA-6BZ	Egypt	P3A-P3Z	Cyprus
HNA-HNZ	Iraq	VPA-VS2	Great Britain & No. Ireland	6DA-6JZ	Mexico	P4A-P4Z	Aruba
HQA-HPZ	Panama	VTA-VWZ	India	6KA-6NZ	Rep. of Korea (South)	P5A-P9Z	Dem. People's Rep. of Korea (North)
HQA-HRZ	Honduras	VXA-VYZ	Canada	6OA-6OZ	Somalia	S2A-S3Z	Bangladesh
HSA-HSZ	Thailand	VZA-VZZ	Australia	6PA-6SZ	Pakistan	S6A-S6Z	Singapore
HTA-HTZ	Nicaragua	WAA-WZZ	United States of America	6TA-6UZ	Sudan	S7A-S7Z	Seychelles
HUA-HUZ	El Salvador	XAA-XIZ	Mexico	6VA-6WZ	Senegal	S9A-S9Z	Sao Tome & Principe
HVA-HVZ	Vatican City State	XJA-XOZ	Canada	6XA-6XZ	Madagascar	T2A-T2Z	Tuvalu
HWA-HYZ	France	XPA-XPZ	Denmark	6YA-6YZ	Jamaica	T3A-T3Z	Kiribati
HZA-HZZ	Saudi Arabia	XQA-XRZ	Chile	6ZA-6ZZ	Liberia	T4A-T4Z	Cuba
IAA-IZZ	Italy	XSA-XSZ	China	7AA-7IZ	Indonesia	T5A-T5Z	Somalia
JAA-JSZ	Japan	XTA-XTZ	Voltaic Republic	7JA-7NZ	Japan	T6A-T6Z	Afghanistan
JTA-JVZ	Mongolia	XUA-XUZ	Cambodia	7OA-7OZ	South Yemen	T7A-T7Z	San Marino
JWA-JXZ	Norway	XVA-XVZ	Vietnam	7PA-7PZ	Lesotho	V2A-V2Z	Antigua
JYA-JYZ	Jordan	XWA-XWZ	Laos	7QA-7QZ	Malawi	V3A-V3Z	Belize
JZA-JZZ	Indonesia	XXA-XXZ	Portugal	7RA-7RZ	Algeria	V4A-V4Z	St. Kitts and Nevis
KAA-KZZ	United States of America	XYA-XZZ	Myanmar	7SA-7SZ	Sweden	V5A-V5Z	Namibia
LAA-LNZ	Norway	YAA-YAZ	Afghanistan	7TA-7YZ	Algeria	V6A-V6Z	Fed. States of Micronesia
LOA-LWZ	Argentina	YBA-YHZ	Indonesia	7ZA-7ZZ	Saudi Arabia	V7A-V7Z	Marshall Is.
LXA-LXZ	Luxembourg	YIA-YIZ	Iraq	8AA-8IZ	Indonesia	V8A-V8Z	Brunei
LYA-LYZ	Lithuania	YJA-YJZ	Vanuatu	8JA-8NZ	Japan	Y2A-Y9Z	Federal Republic of Germany
LZA-LZZ	Bulgaria	YKA-YKZ	Syria	8OA-8OZ	Botswana	Z2A-Z2Z	Zimbabwe
MAA-MZZ	Great Britain & No. Ireland	YLA-YLZ	Latvia	8PA-8PZ	Barbados		
NAA-NZZ	United States of America	YMA-YMZ	Turkey	8QA-8QZ	Maldives Is.		
OAA-OCZ	Peru	YNA-YNZ	Nicaragua	8RA-8RZ	Guyana		
ODA-ODZ	Lebanon	YOA-YRZ	Romania	8SA-8SZ	Sweden		
OEA-OEZ	Austria	YSA-YSZ	El Salvador	8TA-8YZ	India		
OFA-OJZ	Finland	YTA-YUZ	Yugoslavia	8ZA-8ZZ	Saudi Arabia		
		YVA-YYZ	Venezuela				



## ASTRON POWER SUPPLIES

• HEAVY DUTY • HIGH QUALITY • RUGGED • RELIABLE •

### SPECIAL FEATURES

- SOLID STATE ELECTRONICALLY REGULATED
- FOLD-BACK CURRENT LIMITING Protects Power Supply from excessive current & continuous shorted output
- CROWBAR OVER VOLTAGE PROTECTION on all Models except RS-3A, RS-4A, RS-5A, RS-4L, RS-5L
- MAINTAIN REGULATION & LOW RIPPLE at low line input Voltage
- HEAVY DUTY HEAT SINK • CHASSIS MOUNT FUSE
- THREE CONDUCTOR POWER CORD except for RS-3A
- ONE YEAR WARRANTY • MADE IN U.S.A.

### PERFORMANCE SPECIFICATIONS

- INPUT VOLTAGE: 105-125 VAC
- OUTPUT VOLTAGE: 13.8 VDC  $\pm$  0.05 volts (Internally Adjustable: 11-15 VDC)
- RIPPLE Less than 5mv peak to peak (full load & low line)
- All units available in 220 VAC input voltage (except for SL-11A)



MODEL VS-50M

### SL SERIES



MODEL	Colors Gray Black	Continuous Duty (Amps)	ICS* (Amps)	Size (IN) H x W x D	Shipping Wt. (lbs.)
SL-11A	• •	7	11	2 3/4 x 7 3/8 x 9 3/4	11

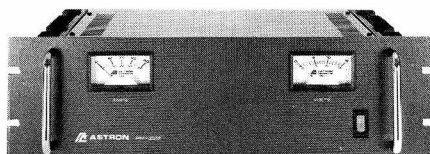
- LOW PROFILE POWER SUPPLY

### RS-L SERIES



MODEL	Continuous Duty (Amps)	ICS* (Amps)	Size (IN) H x W x D	Shipping Wt. (lbs.)
RS-4L	3	4	3 1/2 x 6 1/8 x 7 1/4	6
RS-5L	4	5	3 1/2 x 6 1/8 x 7 1/4	7

- POWER SUPPLIES WITH BUILT IN CIGARETTE LIGHTER RECEPTACLE



### RM SERIES

MODEL RM-35M

MODEL	Continuous Duty (Amps)	ICS* (Amps)	Size (IN) H x W x D	Shipping Wt. (lbs.)
RM-12A	9	12	5 1/4 x 19 x 8 1/4	16
RM-35A	25	35	5 1/4 x 19 x 12 1/2	38
RM-50A	37	50	5 1/4 x 19 x 12 1/2	50
RM-60A	50	55	7 x 19 x 12 1/2	60

- Separate Volt and Amp Meters

MODEL	Continuous Duty (Amps)	ICS* (Amps)	Size (IN) H x W x D	Shipping Wt. (lbs.)
RM-12M	9	12	5 1/4 x 19 x 8 1/4	16
RM-35M	25	35	5 1/4 x 19 x 12 1/2	38
RM-50M	37	50	5 1/4 x 19 x 12 1/2	50
RM-60M	50	55	7 x 19 x 12 1/2	60

### RS-A SERIES



MODEL RS-7A

MODEL	Colors Gray Black	Continuous Duty (Amps)	ICS* (Amps)	Size (IN) H x W x D	Shipping Wt. (lbs.)
RS-3A	• •	2.5	3	3 x 4 1/4 x 5 3/4	4
RS-4A	• •	3	4	3 3/4 x 6 1/2 x 9	5
RS-5A	• •	4	5	3 1/2 x 6 1/8 x 7 1/4	7
RS-7A	• •	5	7	3 3/4 x 6 1/2 x 9	9
RS-7B	• •	5	7	4 x 7 1/2 x 10 3/4	10
RS-10A	• •	7.5	10	4 x 7 1/2 x 10 3/4	11
RS-12A	• •	9	12	4 1/2 x 8 x 9	13
RS-12B	• •	9	12	4 x 7 1/2 x 10 3/4	13
RS-20A	• •	16	20	5 x 9 x 10 1/2	18
RS-35A	• •	25	35	5 x 11 x 11	27
RS-50A	• •	37	50	6 x 13 3/4 x 11	46

### RS-M SERIES



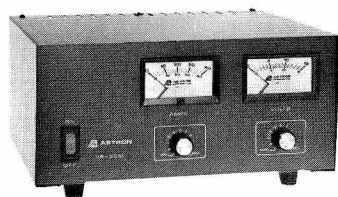
MODEL RS-35M

MODEL	Continuous Duty (Amps)	ICS* (Amps)	Size (IN) H x W x D	Shipping Wt. (lbs.)
RS-12M	9	12	4 1/2 x 8 x 9	13
RS-20M	16	20	5 x 9 x 10 1/2	18
RS-35M	25	35	5 x 11 x 11	27
RS-50M	37	50	6 x 13 3/4 x 11	46

- Switchable volt and Amp meter

- Separate volt and Amp meters

### VS-M AND VRM-M SERIES



MODEL VS-35M

- Separate Volt and Amp Meters • Output Voltage adjustable from 2-15 volts • Current limit adjustable from 1.5 amps to Full Load

MODEL	Continuous Duty (Amps)	ICS* (Amps)	Size (IN) H x W x D	Shipping Wt. (lbs.)
VS-12M	9	12	4 1/2 x 8 x 9	13
VS-20M	16	20	5 x 9 x 10 1/2	20
VS-35M	25	35	5 x 11 x 11	29
VS-50M	37	50	6 x 13 3/4 x 11	46

- Variable rack mount power supplies

MODEL	Continuous Duty (Amps)	ICS* (Amps)	Size (IN) H x W x D	Shipping Wt. (lbs.)
VRM-35M	25	35	5 1/4 x 19 x 12 1/2	38
VRM-50M	37	50	5 1/4 x 19 x 12 1/2	50

### RS-S SERIES



MODEL RS-12S

- Built in speaker

MODEL	Colors Gray Black	Continuous Duty (Amps)	ICS* (Amps)	Size (IN) H x W x D	Shipping Wt. (lbs.)
RS-7S	• •	5	7	4 x 7 1/2 x 10 3/4	10
RS-10S	• •	7.5	10	4 x 7 1/2 x 10 3/4	12
RS-12S	• •	9	12	4 1/2 x 8 x 9	13
RS-20S	• •	16	20	5 x 9 x 10 1/2	18

\*ICS—Intermittent Communication Service (50% Duty Cycle 5min. on 5 min. off)

# CENSUS OF AMATEUR RADIO LICENSES\* in the U.S.A.

## by classes, within states and call areas

Call Area	State	Novice	Technician	General	Advanced	Extra	Club	Military	State Totals	Percent of Licenses
1	CT	1,725	2,130	1,872	1,451	934	48	1	8,211	1.43%
	MA	2,310	4,182	3,243	2,588	1,753	77	3	14,156	2.46
	ME	588	991	963	610	402	10	1	3,565	.62
	NH	591	1,216	902	666	544	12	1	3,934	.68
	RI	417	696	500	325	268	19	1	2,226	.39
	VT	233	508	396	280	198	8		1,623	.28
		5,864	9,725	7,876	5,920	4,149	174	7	33,715	5.86
2	GU	168	78	44	38	31			359	.06
	NJ	2,686	4,540	3,352	3,049	1,881	147	7	15,662	2.72
	NY	6,977	9,294	6,596	5,448	3,256	164	4	31,739	5.52
	VI	42	92	77	50	33			294	.05
	AE	134	182	122	96	39	1	8	582	.10
		10,007	14,186	10,191	8,681	5,240	312	19	48,636	8.46
3	DC	85	96	126	94	80	3	3	487	.08
	DE	211	399	271	226	177	4	1	1,239	.22
	MD	1,551	2,991	2,165	2,103	1,322	53	9	10,194	1.77
	PA	3,760	6,411	4,904	4,170	2,548	113	12	21,918	3.31
		5,607	9,897	7,466	6,595	4,127	173	25	33,888	5.89
4	AL	1,083	3,119	1,666	1,517	896	22	2	8,305	1.44
	FL	6,764	9,799	8,326	6,774	3,463	65	3	35,194	6.12
	GA	1,535	3,988	2,418	2,253	1,226	35	3	11,458	1.99
	KY	1,242	2,298	1,362	1,091	652	19	1	6,665	1.16
	NC	1,922	4,400	2,792	2,534	1,355	35	3	13,041	2.27
	PR	4,127	2,213	653	510	231	3	1	7,738	1.35
	SC	697	1,676	1,233	961	540	57	2	5,166	.90
	TN	1,554	3,977	2,122	2,105	1,152	35	3	10,948	1.90
	VA	2,062	4,175	2,962	2,767	1,689	33	4	13,692	2.38
	AA	42	37	36	11	7			133	.02
		21,028	35,682	23,570	20,523	11,211	304	22	112,340	19.53
5	AR	620	1,785	953	919	523	14	1	4,815	.84
	LA	933	2,015	1,390	1,292	712	24	3	6,369	1.11
	MS	557	1,261	811	731	386	8	2	3,756	.65
	NM	409	1,210	830	783	473	10		3,715	.65
	OK	1,145	2,542	1,426	1,416	736	25	1	7,291	1.27
	TX	4,495	11,468	7,378	6,881	3,853	97	7	34,179	5.94
		8,159	20,281	12,788	12,022	6,683	178	14	60,125	10.45
6	CA	16,509	30,335	16,103	15,028	7,274	326	14	85,589	14.88
	HI	699	835	574	493	289	11	4	2,905	.51
	AP	130	108	80	46	34	3	7	408	.07
	FM	1							1	.00
	MP	6	6	2	8	9			31	.01
	PW				1			1	2	.00
	TT	2		2	3	6	1	8	22	.00
		17,347	31,284	16,761	15,579	7,612	341	34	88,958	15.47
7	AK	461	676	627	479	282	8	5	2,538	.44
	AZ	1,261	3,958	2,395	2,185	1,138	17	1	10,955	1.90
	ID	414	914	673	502	261	9		2,773	.48
	MT	369	607	562	384	257	12		2,191	.38
	NV	358	1,001	747	543	316	10		2,975	.52
	OR	1,633	3,153	2,432	1,879	1,016	26	1	10,190	1.77
	UT	738	2,172	678	688	396	10	2	4,734	.82
	WA	3,201	6,250	4,199	3,288	1,908	49	7	18,902	3.29
	WY	226	427	280	200	149	4		1,286	.22
		8,711	19,158	12,643	10,148	5,723	145	16	56,544	9.83
8	AS	11		8	5	3		1	28	.00
	MI	2,737	5,731	4,104	3,409	1,854	71	1	17,907	3.11
	OH	4,237	9,598	5,375	4,633	2,631	129	1	26,604	4.63
	WV	922	1,622	859	667	429	15	2	4,516	.79
		7,907	16,951	10,346	8,714	4,917	215	5	49,055	8.53
9	IL	3,667	6,573	4,775	3,944	2,268	126	13	21,366	3.71
	IN	2,157	4,447	2,672	2,247	1,246	82		12,851	2.23
	WI	1,323	2,557	2,097	1,707	943	38		8,665	1.51
		7,147	13,577	9,544	7,898	4,457	246	13	42,882	7.46
10	CO	1,353	2,859	2,070	1,793	1,008	23		9,106	1.58
	IA	1,073	1,567	1,442	1,355	626	33	2	6,098	1.06
	KS	1,061	1,802	1,499	1,093	617	29	1	6,102	1.06
	MN	1,351	2,603	2,255	1,867	978	49	1	9,104	1.58
	MO	1,531	3,100	2,508	2,081	1,145	49	1	10,415	1.81
	ND	265	377	359	232	124	7		1,364	.24
	NE	515	921	971	742	324	23		3,496	.61
	SD	187	343	350	303	145	10		1,338	.23
		7,336	13,572	11,454	9,466	4,967	223	5	47,023	8.18
Grand Total		99,193	184,392	122,735	106,964	59,382	2,315	165	575,146	
Percent of total licenses		17.25%	32.06%	21.34%	18.60%	10.32%	.40%	.03%		

8294 Then-Now Listings.

1216 Silent Key Listings.

83636 Changes in Listings.





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IC-735 Gen. Cvg. Xcvr	1099.00	Call \$
IC-751A Gen. Cvg. Xcvr	1699.00	Call \$
IC-728 New, All-Band HF	1099.00	Call \$
IC-726 HF/50 MHz All Mode	1299.00	Call \$
IC-2KL 500w, Amp	2079.00	Call \$
IC-4KL 1 kW Amp	7275.00	Call \$

Receivers	List	Jun's
IC-R9000 100 kHz to 1999.8 MHz	5459.00	Call \$
IC-R7000 25-1300 + MHz Rcvr	1199.00	Call \$
IC-R71A 100 kHz - 30 MHz Rcvr	999.00	Call \$
IC-R1 100 kHz - 1300 MHz	624.00	Call \$
IC-R72 30 kHz - 30 MHz Rcvr	972.00	Call \$
IC-R100 100 kHz - 1856 MHz Rcvr	707.00	Call \$

VHF	List	Jun's
IC-229A/H, 25/50w, 2 Meter Mobile	449/479.	Call \$
IC-P2AT New 2 Meter HT	424.00	Call \$
IC-2GAT, New 7w HT	429.95	Call \$
IC-2SAT Micro Sized HT	439.00	Call \$
IC-2SRA, 2m, HT/Scanner	599.00	Call \$
IC-901 New Remote Mount Mobile	1199.00	Call \$

UHF	List	Jun's
IC-P4AT New 70cm HT	467.00	Call \$
IC-4SAT Micro Sized HT	449.00	Call \$
IC-4SRA, 70cm w/Scanner, HT	600.00	Call \$
IC-4GAT, New 6w HT	449.95	Call \$
IC-3220A/H Dual Band Mobile	659/699.	Call \$
IC-2410A, 2m/70cm, Mobile	889.00	Call \$
IC-24AT New 2m/440 mini HT	629.95	Call \$
IC-W2A, 2M/70cm NEW HT	629.95	Call \$

220 MHz	List	Jun's
IC-3SAT Micro Sized HT	449.99	Call \$
1.2 GHz	List	Jun's
IC-12GAT Super HT	529.95	Call \$

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TS-950SD New Digital Processor HF	\$4499.95	Call \$
TS-850S New, All Mode, All Band	1899.95	Call \$
TS-450S/AT New HF Xcvr	1549.95	Call \$
TS-450S New HF Xcvr	1349.95	Call \$
TS-140S Compact, Gen. Cvg. Xcvr	949.95	Call \$
TS-690S HF Plus 6m Xcvr	1549.95	Call \$
TL-922A HF Amp	1982.95	Call \$

Receivers	List	Jun's
R-5000 100 kHz - 30 MHz	1049.95	Call \$
R-2000 150 kHz - 30 MHz	799.95	Call \$
RZ-1 Compact Scanning Rcvr.	599.95	Call \$

VHF	List	Jun's
TH-28A New 2 Meter HT	389.95	Call \$
TM-741A FM, 2M/440, Triple Receive	849.95	Call \$
TM-641A 2M/220 Triple Receiver	849.95	Call \$
TR-751A All Mode Mobile 25w	669.95	Call \$
TM-241A 50w Mobile FM	469.95	Call \$
TH-77A 2m/440 HT	599.95	Call \$
TH-78A New 2m/70cm HT	599.00	Call \$

UHF	List	Jun's
TH-48A New 70cm HT	419.95	Call \$
TM-941A 2M/440/1.2 GHz	1199.95	Call \$
TS-790A All Mode, 2m/70cm/1.2 GHz	1999.95	Call \$
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TM-441A Compact 35w Mobile	479.95	Call \$
TH-55 AT 1.2 GHz HT	524.95	Call \$
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TH-315A Full Featured 2.5w HT	419.95	Call \$

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FT-767 4 Band New	2299.00	Call \$
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FRG-8800 150 kHz - 30 MHz	784.00	Call \$
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FT-26 Mini, 2 Meter HT	329.00	Call \$
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FT-815, 70cm, HT	439.00	Call \$
FT-911 Compact 1.2 GHz HT	505.00	Call \$
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FT-912 1.2 GHz, 10w Mobile	581.00	Call \$

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FT-690R MKII, 6m, All Mode, port.	752.00	Call \$

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FT-5200 Ultra Compact 2m/440 Mob.	749.00	Call \$
FT-6200 Ultra Comp. 440/1.2 GHz Mob.	899.00	Call \$
FT-470 Compact 2m/70cm HT	576.00	Call \$

Repeaters	List	Jun's
FTR-2410 2m Repeaters	1154.00	Call \$
FTR-5410 70cm Repeaters	1154.00	Call \$

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G-400RC light/med. duty 11 sq. ft.	242.00	Call \$
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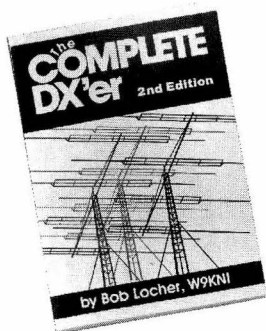
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Prefix	Country	Number of Radio Amateur Licenses Listed	Prefix	Country	Number of Radio Amateur Licenses Listed	Prefix	Country	Number of Radio Amateur Licenses Listed	
AP	Pakistan	114	J6	St. Lucia	181	XU	Cambodia	7	
A2	Botswana	47	J7	Dominica	114	XV	Vietnam	5	
A3	Tonga	86	J8	St. Vincent	60	XW	Laos	4	
A4	Oman	84				XX	Macao	40	
A5	Bhutan	5	LA-LJ	Norway	5,920	XZ	Myanmar	2	
A6	United Arab	4	LQ-LW	Argentina	31,956				
A7	Qatar	32	LX	Luxembourg	404	YB-YH	Indonesia	65,910	
A9	Bahrain	67	LY,RP,UP	Lithuania	1,509	YI	Iraq	3	
			LZ	Bulgaria	1,508	YJ	Vanuatu	36	
B	China	67				YK	Syria	14	
BV	Taiwan	158	N	U.S.A. (See K,A,N,W)		YL,RQ,UQ	Latvia	937	
						YN	Nicaragua	380	
CE	Chile	8,712	OA	PERU	2,160	YO	Romania	3,801	
CM, CO	Cuba	1,224	OD	Lebanon	49	YS	El Salvador	412	
CN	Morocco	223	OE	Austria	5,913	YT,YU,YZ	Yugoslavia	6,678	
CP	Bolivia	1,948	OH,OI	Finland	4,888	YV-YW	Venezuela	20,740	
CQ-CU	Portugal	3,113	OH<	Aland Is.	47	YY<	Aves Is.	4	
CS3, CT3	Madeira Is.	48	OK,OL	Czechoslovakia	5,657	Y2-Y9	Federal Republic	5,142	
CU	Azores Is.	388	ON	Belgium	5,127				
CV-CX	Uruguay	3,503	OX	Greenland	105	ZA	Albania	13	
C2	Nauru	16	OY	Faroes	123	ZB2	Gibraltar	54	
C3	Andorra	459	OZ	Denmark	10,077	ZC4	Cyprus	18	
C5	The Gambia	20				ZD7	St. Helena Is.	17	
C6	Bahama Is.	66	PA-PI	Netherlands	14,969	ZD8	Ascension Is.	49	
C8, C9	Mozambique	4	PJ	Curacao, Netherlands Antilles	60	ZD9	Tristan da Cunha Island	13	
			PJ	Bonaire, Netherlands Antilles	4	ZD9	Gough Island	1	
DA	Federal Republic of Germany	71,790	PJ	Sint Eustatius, Netherlands Antilles	4	ZF	Cayman Is.	137	
DU-DZ	Philippines	4,110	PJ	Saba, Netherlands Antilles	1	ZK1	Cook Islands	64	
D2	Angola	11	PJ	Sint Maarten, Netherlands Antilles	26	ZK2	Niue Island	14	
D4	Cape Verde	2	PP-PY	Brazil	26,802	ZL	New Zealand	6,505	
D6	State of Comoros	28	PY<	Fernando de	13	ZP	Paraguay	959	
			PY<	Trindade & Martim	3	ZR-ZT	Republic of South Africa	5,102	
EA-EH	Spain	38,902	PZ	Surinam	98	Z2	Zimbabwe	105	
EA6-EH6	Balearic	1,014	P2	Papua New Guinea	235				
EA8-EH8	Canary	2,683	P4	Aruba	88	3A	Monaco	61	
EA9-EH9	Ceuta & Melilla	584				3B6	Agalega Is.	4	
EI	Ireland	1,896	R,U	C.I.S.	36,084	3B7	St. Brandon Is.	4	
EJ	Aran Is., Ireland	7	RF,UF	Georgia	299	3B8	Mauritius Is.	44	
EL	Liberia	115				3B9	Rodriguez Is.	6	
EP	Iran	31	SA-SM	Sweden	12,854	3C	Equatorial Guinea	10	
ES,RR,UR	Estonia	1,034	SN-SR	Poland	7,431	3D2	Fiji Is.	87	
			ST	Sudan	6	3D6	Swaziland	48	
F	France	15,550	SU	Egypt	34	3V	Tunisia	4	
FG	Guadeloupe	143	SV	Greece	1,246	3W	Vietnam	2	
FH	Mayotte	21	S2	Bangladesh	2				
FJ	St. Barthelemy	9	S7	Seychelles	28	4F	Philippines	20	
FK	New Caledonia	137	S8	Transkei	12	4K	C.I.S.	21	
FM	Martinique	143	S9	Sao Tome & Principe	3	4N,4O	Yugoslavia	36	
FO	French Polynesia	238				4S	Sri Lanka	137	
FP	St. Pierre & Miquelon Is.	23	TA-TC	Turkey	572	4U	United Nations	2	
FR	Reunion Is.	132	TE, TI	Costa Rica	1,457	4U	United Nations	2	
FS	Saint Martin	2	T9	Cocos Is., Costa Rica	15	4X,4Z	Israel	990	
FT	French	6	TF	Iceland	136				
FW	Wallis & Futuna	1	TG	Guatemala	558	5A	Libya	2	
FY	French Guiana	97	TJ	Cameroon	23	5B	Cyprus	670	
			TK	Corsica	135	5H1	Zanzibar	1	
G	England, U.K.	60,392	TL	Central African	27	5H3	Tanzania	26	
GD	Isle of Man	184	TN	Congo	8	5L	Liberia	1	
GI	Northern Ireland	1,394	TP	Council of Europe	1	5N	Nigeria	269	
GJ	Jersey	122	TR	Gabon	56	5R	Madagascar	7	
GM	Scotland, U.K.	3,287	TT	Chad	6	5T	Mauritania	10	
GU	Bailiwick of Guernsey	120	TU	Ivory Coast	360	5U	Niger	18	
GW,GX	Wales, U.K.	3,411	TV-TX	France	1	5V	Togo	11	
			TY	Benin	8	5W	Western Samoa	148	
HA,HG	Hungary	5,070	TZ	Mali	16	5X	Uganda	5	
HB	Switzerland	4,702	T2	Tuvalu	17	5Z	Kenya	170	
HB<	Liechtenstein	18	T3	Kiribati	41				
HC	Ecuador	1,933	T5	Somali Republic	4	6T,6U	Sudan	4	
HC8	Galapagos Is., Ecuador	37	T7	Republic of San Marino	52	6V-6W	Senegal	161	
HH	Haiti	142				6Y	Jamaica	186	
HI	Dominican Republic	1,969	VE	Canada	27,900				
HJ-HK	Colombia	7,764	VK	Australia	23,001	7J-7N	Japan	277	
HK<	San Andres & Providencia	117	V01	Newfoundland	693	7P	Lesotho	18	
HL	Korea	5,029	V02	Labrador, Canada	49	7Q	Malawi	14	
HP	Panama	1,655	VP2E	Anguilla, Leeward Is.	40	7X	Algeria	104	
HR	Honduras	289	VP2M	Montserrat, Leeward Is.	139	7Z	Saudi Arabia	2	
HS	Thailand	397	VP2V	British Virgin Is., Leeward Is.	51				
HV	Vatican City	3	VP5	Turks & Caicos	33	8J-8N	Japanese Special Stations	43	
HZ	Saudi Arabia	10	VP8	Falkland Is.	797	8P	Barbados	266	
H4	Solomon Is.	16	VP9	Bermuda	154	8Q	Maldives Is.	45	
H5	Rep. of Bophuthatswana	11	V09	Chagos Archipelago	34	8R	Guyana	22	
			VR6	Pitcairn Is.	9				
I-IZ	Italy	21,457	VR2,VS6	Hong Kong	337	9G	Ghana	180	
IA	Tuscan Archipelago, Italy	8	VU	India	5,519	9H	Malta	440	
IO	Capri & Ischia Is., Italy	37	VY1,VY5	Yukon Territory	90	9I,9J	Zambia	46	
IM-IS	Sardinia, Italy	406	VY2	Prince Edward Is.	165	9K	Kuwait	187	
IT	Sicily, Italy	1,015	V2	Antigua	52	9L	Sierra Leone	37	
			V3	Belize	368	9M2	Malaysia	266	
JA-JS	Japan	35,912	V4	St. Kitts-Nevis	65	9M6	Sabah, Malaysia	52	
JD1	Ogasawara Is.	262	V5	Namibia	84	9M8	Sarawak, Malaysia	37	
JT,JU	Mongolia	55	V6	Federated	44	9N	Nepal	4	
JW	Svalbard Is.	50	V7	Marshall Islands	34	9Q	Zaire	9	
JX	Jan Mayen Is.	29	V8	Brunei	77	9U	Burundi	2	
JY	Jordan	158				9V	Singapore	80	
J2	Djibouti	41	XE,XF	Mexico	5,833	9X	Rwanda	33	
J3	Grenada	68	XP	Greenland	1	9Y	Trinidad & Tobago	282	
J5	Guinea Bissau	8	XQ	Chile	138				
			XT	Burkina-Faso	24				

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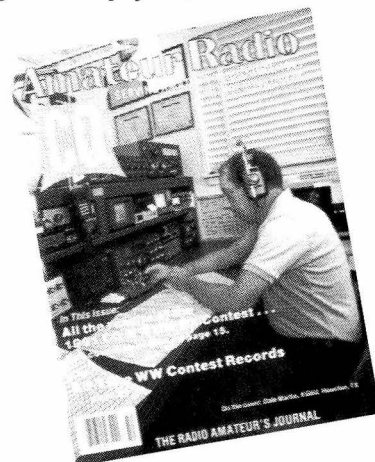
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ALABAMA	AL	948	278	310	704	526	425	014	663												
1.44% of U.S. amateur population		949	1,024	311	1	527	403	015	776												
Zip 350	710 licenses	950	2,966	312	267	528	229	016	246												
351	538	951	2,297	313	140	KANSAS	KS	017	1,559												
352	1,180	952	739	314	292			018	1,653												
354	281	953	1,360	315	326			019	1,182												
355	221	954	1,417	316	139			020	953												
356	721	955	467	317	472			021	2,401												
357	391	956	2,854	318	80			022	22												
358	902	957	314	319	175			023	714												
359	491	958	1,397	GUAM	GU			024	107												
360	265	959	1,403					025	381												
361	320	960	889	0.07% of U.S. amateur population	0.07% of U.S. amateur population			026	699												
362	341	961	196	Zip 969	415 licenses			027	989												
363	417	962	73	HAWAII	HI	KENTUCKY	KY	MICHIGAN	MI												
364	137	963	130																		
365	420	964	13																		
366	504	965	69																		
367	208	966	123	0.51% of U.S. amateur population	0.51% of U.S. amateur population																
368	255	COLORADO	CO	Zip 967	1,855 licenses																
369	3			968	1,078																
ALASKA	AK			ILLINOIS	IL																
0.44% of U.S. amateur population	1.063 licenses									ILLINOIS	IL										
995	1.063 licenses																				



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## DELUXE SWR & WATTMETER

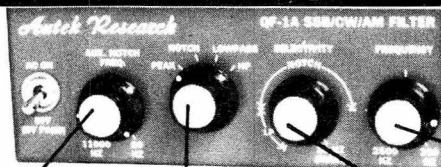


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# CENSUS OF U.S. AMATEURS BY STATE AND ZIP CODE

595	73	124	443	746	143	373	1,319	240	684
596	177	125	996	747	122	374	420	241	396
597	423	126	249	748	299	376	1,011	242	360
598	362	127	179	749	103	377	857	243	324
599	236	128	441			378	1,172	244	302
NEBRASKA	NE	129	355	OREGON	OR	379	984	245	891
0.61% of U.S. amateur population		130	957	1.77% of U.S. amateur population		380	396	246	155
Zip 680	365 licenses	131	457	Zip 970	1,869 licenses	381	1,448	VIRGIN ISLAND	VI
681	856	132	520	971	850	382	188	0.05% of U.S. amateur population	
683	148	133	406	972	2,032	383	440	Zip 008	297 licenses
684	146	134	651	973	1,439	384	195	WASHINGTON	WA
685	604	135	163	974	1,689	385	316	3.29% of U.S. amateur population	
686	163	136	447	975	943	TEXAS	TX	Zip 980	3,925 licenses
687	241	137	422	976	452	5.94% of U.S. amateur population		981	2,594
688	290	138	502	977	425	Zip 750	3,593 licenses	982	2,659
689	181	139	256	978	453	751	1,061	983	2,299
690	79	140	1,098	979	38	752	1,800	984	963
691	229	141	534	PENNSYLVANIA	PA	753	19	985	1,285
692	29	142	895	3.81% of U.S. amateur population		754	567	986	1,318
693	165	143	96	Zip 150	1,114 licenses	755	260	987	75
NEVADA	NV	144	819	151	753	756	564	988	506
0.52% of U.S. amateur population		145	918	152	1,234	757	599	989	596
Zip 890	461 licenses	146	1,105	153	292	758	218	990	313
891	1,112	147	400	154	262	759	325	991	452
893	18	148	747	155	136	760	2,187	992	951
894	606	149	137	156	572	761	1,575	993	921
895	518	NORTH CAROLINA	NC	157	214	762	561	994	45
897	195	2.27% of U.S. amateur population		158	186	763	445	WEST VIRGINIA	WV
898	65	Zip 270	431 licenses	159	258	764	161	0.79% of U.S. amateur population	
NEW HAMPSHIRE	NH	271	462	160	367	765	568	Zip 247	240 licenses
0.68% of U.S. amateur population		272	914	161	477	766	245	248	171
Zip 030	1,511 licenses	273	438	162	117	767	277	249	83
031	347	274	482	163	378	768	145	250	133
032	493	275	1,076	164	258	769	243	251	214
033	171	276	880	165	387	770	3,122	252	107
034	270	277	303	166	350	771	95	253	279
035	103	278	622	167	101	772	1,122	254	204
036	39	279	261	168	317	773	836	255	270
037	200	280	838	169	183	774	1,842	256	211
038	800	281	865	170	971	775	555	257	221
NEW JERSEY	NJ	282	774	171	240	776	230	258	234
2.72% of U.S. amateur population		283	935	172	203	777	391	259	120
Zip 070	2,474 licenses	284	485	173	578	778	312	260	404
071	211	285	708	174	297	779	504	261	452
072	171	286	964	175	472	780	398	262	190
073	133	287	1,212	176	254	781	2,021	263	246
074	1,191	288	306	177	287	782	283	264	133
075	156	289	85	178	363	783	480	265	339
076	1,142	NORTH DAKOTA	ND	179	210	784	626	266	66
077	1,424	0.24% of U.S. amateur population		180	807	785	809	267	116
078	862	Zip 580	123 licenses	181	263	786	1,382	268	83
079	621	581	204	182	234	787	194	WISCONSIN	WI
080	2,437	582	225	183	261	788	123	1.51% of U.S. amateur population	
081	236	583	94	184	369	789	342	Zip 530	988 licenses
082	488	584	119	185	169	790	304	531	1,005
083	463	585	252	186	370	791	65	532	1,128
084	65	586	139	187	227	792	241	533	232
085	555	587	174	188	234	793	407	534	715
086	444	588	34	189	891	794	173	535	506
087	900	OHIO	OH	190	2,616	795	306	536	48
088	1,586	4.63% of U.S. amateur population		191	1,302	796	680	537	290
089	103	Zip 430	1,384 licenses	192	1	797	100	538	183
NEW MEXICO	NM	431	648	193	797	798	831	539	308
0.65% of U.S. amateur population		432	1,302	194	945	UTAH	UT	540	225
Zip 870	255 licenses	433	454	195	297	0.82% of U.S. amateur population		541	236
871	1,268	434	348	196	304	Zip 840	1,875 licenses	542	767
873	38	435	664	PUERTO RICO	PR	841	1,166	543	255
874	116	436	751	1.34% of U.S. amateur population		842	370	544	271
875	485	437	396	Zip 006	4,216 licenses	843	254	545	304
877	40	438	143	007	2,207	844	127	546	660
878	58	439	532	009	1,312	845	599	547	
879	49	440	2,274	RHODE ISLAND	RI	846	343	548	
880	676	441	2,268	0.39% of U.S. amateur population		VERMONT	VT	549	
881	108	442	1,441	Zip 028	1,649 licenses	0.28% of U.S. amateur population		WYOMING	WY
882	352	443	650	029	577	Zip 050	190 licenses	0.22% of U.S. amateur population	
883	246	444	880	SOUTH CAROLINA	SC	051	96	Zip 820	337 licenses
884	24	445	361	0.90% of U.S. amateur population		052	119	821	4
NEW YORK	NY	446	983	Zip 290	399 licenses	053	85	822	87
5.52% of U.S. amateur population		447	468	291	473	054	626	823	37
Zip 100	1,048 licenses	448	746	292	379	055	215	824	78
101	57	449	294	293	442	056	175	825	218
102	8	450	1,433	294	846	057	115	826	91
103	1,503	451	789	295	452	058	2	827	103
104	663	452	2,047	296	1,383	059		828	151
105	1,169	453	1,676	297	407	VIRGINIA	VA	829	30
106	91	454	1,553	298	255	2.38% of U.S. amateur population		830	43
107	308	455	222	299	130	Zip 220	1,733 licenses	831	
108	114	456	671	SOUTH DAKOTA	SD	221	1,800	APO, FPO (MILITARY)	
109	845	457	383	0.23% of U.S. amateur population		222	390	0.49% of U.S. amateur population	
110	527	458	843	Zip 570	264 licenses	223	578	Zip 090	153 licenses
111	127	OKLAHOMA	OK	571	178	224	274	091	152
112	1,472	1.27% of U.S. amateur population		572	177	225	246	092	73
113	1,052	Zip 730	1,304 licenses	573	133	226	313	093	12
114	689	731	1,290	574	126	227	131	094	24
115	1,286	732	146	575	77	228	413	095	85
116	119	733	462	576	26	229	301	096	46
117	3,530	734	95	577	357	230	468	097	25
118	222	735	307	TENNESSEE	TN	231	765	098	13
119	515	736	81	1.90% of U.S. amateur population		232	393	099	133
120	861	737	50	Zip 370	932 licenses	233	906	962	73
121	625	738	1,093	371	623	234	365	963	130
122	234	739	1,034	372	647	235	723	964	13
123	478	740	235			236	145	965	69
		741	375			237	285	966	123
		742	152			238	125	967	1,855



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A2	Botswana	KH5	Palmyra, Jarvis Is.	VP9	Bermuda Is.
A3	Tonga	KH5K	Kingman Reef	VO9	Chagos Arch.
A4	Oman	KH6	Hawaiian Is.	VR6	Pitcairn Is.
A5	Bhutan	KH7	Kure Is.	VS6	Hong Kong
A6	United Arab Emirates	KH8	American Samoa	VU	India
A7	Qatar	KH9	Wake Is.	VU	Andaman & Nicobar Is.
A9	Bahrain	KH0	Mariana Is.	VU	Laccadive Is.
BV	Taiwan	KL7	Alaska	V2	Antigua, Barbuda
BY, BT	China	KP1	Navassa Is.	V3	Belize
CA-CE	Chile	KP2	Virgin Is.	V4	St. Kitts and Nevis
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KC4, LA, LU, OR4, UA1, UK1, VK0, VP8, Y8, ZL5, ZS1, ZX0, 3Y, 4K1, 8J		KP5	Desecheo Is.	V7	Marshall Is.
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EA8-EH8	Canary Is.	SA-SM	Sweden	ZF	Cayman Is.
EA9-EH9	Ceuta and Melilla	SN-SR	Poland	ZK1	South Cook Is.
EI-EJ	Ireland	ST	Sudan	ZK1	North Cook Is.
EL	Liberia	ST0	Southern Sudan	ZK2	Niue
EP-EQ	Iran	SU	Egypt	ZK3	Tokelau Is.
ET	Ethiopia	SV-SZ	Greece	ZL, ZM	New Zealand
F	France	SV5	Dodecanese Is.	ZL7	Chatham Is.
FG	Guadeloupe	SV9	Crete	ZL8	Kermadec Is.
FH	Mayotte	SV/A	Mount Athos	ZL9	Auckland Is. & Campbell Is.
FJ, FS	Saint Martin	S2	Bangladesh	ZP	Paraguay
FK	New Caledonia	S7	Seychelles	ZR-ZU	Rep. of South Africa
FM	Martinique	S9	Sao Tome & Principe	ZR2-ZU8	Prince Edward & Marion Is.
FO	Clipperton Is.	S0	Western Sahara	ZS	Penguin Is.
FO	French Polynesia	TA-TC	Turkey	ZS9	Walvis Bay
FR/G	St. Pierre & Miquelon	TF	Iceland	Z2	Zimbabwe
FR/J, FR/E	Glorioso Is.	TG, TD	Guatemala	1A0	Sovereign Military Order of Malta
FR	Juan de Nova, Europa	TI, TE	Costa Rica	1S	Spratly Is.
FR/T	Reunion	T19	Cocos Is.	3A	Monaco
FT8W	Tromelin	TJ	Cameroun	3B6, 3B7	Agalega & St. Brandon Is.
FT8X	Crozet Is.	TK	Corsica	3B8	Mauritius Is.
FT8Z	Kerguelen Is.	TL	Central African Rep.	3B9	Rodriguez Is.
FW	Amsterdam & St. Paul Is.	TN	Congo	3C	Equatorial Guinea
FY	Wallis & Futuna Is.	TR	Gabon	3C0	Pagalu Is.
G	French Guiana	TT	Chad	3D2	Fiji Is.
GD	England	TV	Ivory Coast	3D2	Conway Reef
GI	Isle of Man	TZ	Benin	3D2	Rotuma Is.
GJ	Northern Ireland	T2	Mali	3DA	Swaziland
GM	Jersey	T2	Tuvalu	3V	Tunisia
GU	Scotland	T30	West Kiribati (Gilbert & Ocean Is.)	3W, XV	Vietnam
GW	Guernsey & Dependencies	T31	Cent. Kiribati (Br. Phoenix Is.)	3X	Guinea
HA, HG	Wales	T32	East Kiribati (Line Is.)	3Y	Bouvet
HB	Hungary	T33	Banaba Is.	3Y	Peter I Is.
HB0	Switzerland	T5	Somalia	4J	Malji Vysotskij Is.
HC-HD	Liechtenstein	T7	San Marino	4P-4S	Sri Lanka
HC8-HD8	Ecuador	UA1, 3, 4, 6	European R. S.F. S. R.	4U	I. T. U. Geneva
HH	Galapagos Is.	UA1	Franz Josef Land	4U	UN Hq. New York
HI	Haiti	UA2	Kaliningrad	4X, 4Z	Israel
HJ-HK	Dominican Republic	UA9, UA0	Asiatic R. S.F. S. R.	5A	Libya
HK0	Colombia	UB, UT, UY	Ukraine	5B	Cyprus
HK0	Malpelo Is.	UC	Byelorussia	5H-5I	Tanzania
HL	San Andres & Providencia	UD	Azerbaijan	5N-5O	Nigeria
HO-HP	Korea	UF	Georgia	5R-5S	Madagascar
HQ-HR	Panama	UG	Armenia	5T	Mauritania
HS	Honduras	UH	Turkmenistan	5U	Niger
HV	Thailand	UI	Uzbekistan	5V	Togo
HZ	Vatican	UJ	Tadzhikistan	5W	Western Samoa
H4	Saudi Arabia	UL	Kazakhstan	5X	Uganda
I	Solomon Is.	UM	Kirghizia	5Y-5Z	Kenya
IM0, IS0	Italy	UO	Moldavia	6V-6W	Senegal
JA-JS	Sardinia	UP	Lithuania	6Y	Jamaica
JD1	Japan	UQ	Latvia	70	Yemen
JD1	Minami-Tori-Shima	UR	Estonia	7P	Lesotho
JD1	Ogasawara Is.	VE, VO, VY	Canada	7Q	Malawi
JD1	Mongolia	VK	Australia	7T-7Y	Algeria
JW	Svalbard Is.	VK9	Lord Howe Is.	8P	Barbados
JX	Jan Mayen Is.	VK9	Willis Is.	8Q	Maldives Is.
JY	Jordan	VK9	Christmas Is.	8R	Guyana
J2	Djibouti	VK9	Cocos (Keeling) Is.	9G	Ghana
J3	Grenada	VK9	Melish Reef	9H	Malta
J5	Guinea-Bissau	VK9	Norfolk Is.	9I-9J	Zambia
J6	St. Lucia	VK0	Heard Is.	9K	Kuwait
J7	Dominica	VK0	Macquarie Is.	9L	Sierra Leone
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K, W, N, AA-AL	United States of America	VP2M	Montserrat	9M6, 9, 8	Eastern Malaysia
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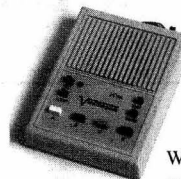
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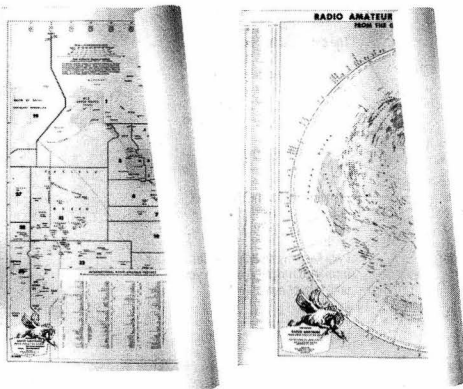


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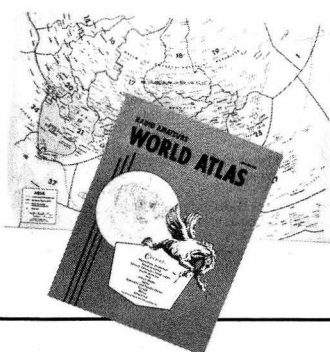
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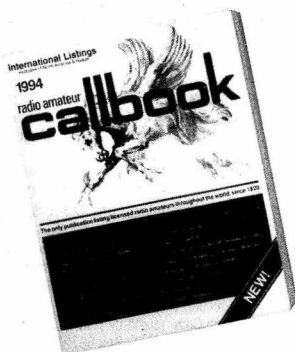
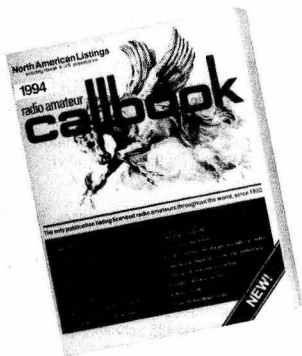
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# INTERNATIONAL "Q" SIGNALS

ABBREVIATIONS	QUESTIONS	ANSWERS OR ADVICE	ABBREVIATIONS	QUESTIONS	ANSWERS OR ADVICE
QRA	What is the name of your station?	The name of my station is ...	QSR	Will you listen to ... [call sign(s)] on ... kHz (or MHz)?	I am listening to [call sign(s)] on ... kHz (or MHz).
QRB	How far approximately are you from my station?	The approximate distance between our stations is ... nautical miles (or kilometers).	QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency (or on ... kHz (or MHz)).
QRD	Where are you bound and where are you from?	I am bound for ... from ...	QSZ	Shall I send each word or group or more than once?	Send each word or group twice (or ... times).
QRG	Will you tell me my exact frequency (or that of ...)?	Your exact frequency (or that of ...) is ... kHz (or MHz).	QTA	Shall I cancel telegram number ... as if it had not been sent?	Cancel telegram number ... as if it had not been sent.
QRH	Does my frequency vary?	Your frequency varies.	QTB	Do you agree with my counting of words?	I do not agree with your counting of words. I will repeat the first letter or digit of each word or group.
QRI	How is the tone of my transmission?	The tone of your transmission is 1. Good. 2. Variable. 3. Bad.	QTC	How many telegrams have you to send?	I have ... telegrams for you (or for ...).
QRK	What is the readability of my signals (or those of ...)?	The readability of your signals (or those of ...) is ... 1. Unreadable. 2. Readable now and then. 3. Readable, but with difficulty. 4. Readable. 5. Perfectly readable.	QTE	What is my TRUE bearing from you?  or What is my TRUE bearing from ... (call sign)?  or What is the TRUE bearing of (call sign) from ... (call sign)?	Your TRUE bearing from me is ... degrees (at ... hours). or Your TRUE bearing from ... (call sign) was ... degrees (at ... hours). or The TRUE bearing of ... (call sign) from (call sign) was ... degrees (at ... hours).
QRL	Are you busy?	I am busy (or I am busy with ...). Please do not interfere.	QTH	Will you send two dashes of ten seconds each followed by your call sign (repeated ... times) [on ... kHz (or MHz)]? or Will you request ... to send two dashes of ten seconds followed by his call sign (repeated ... times) on ... kHz (or MHz)?	I am going to send two dashes of ten seconds each followed by my call sign (repeated ... times) [on ... kHz (or MHz)]. or I have requested ... to send two dashes of ten seconds followed by his call sign (repeated ... times) on ... kHz (or MHz).
QRM	Are you being interfered with?	I am being interfered with.	QTI	What is your position in latitude and longitude (or according to any other indication)?	My position is ... latitude ... longitude (or according to any other indication).
QRN	Are you troubled by static?	I am troubled by static.	QTL	What is your TRUE track?	My TRUE track is ... degrees.
QRO	Shall I increase power?	Increase power.	QTM	What is your speed?	My speed is ... knots (or kilometers per hour).
QRP	Shall I decrease power?	Decrease power.	QTN	What is your TRUE heading?	My TRUE heading is ... degrees.
QRQ	Shall I send faster?	Send faster ( ... words per minute).	QTO	At what time did you depart from ... (place)?	I departed from ... (place) at ... hours.
QRR	Are you ready for automatic operation?	I am ready for automatic operation. Send at ... words per minute.	QTP	Have you left dock (or port)? or Are you airborne?	I have left dock (or port). or I am airborne.
QRS	Shall I send more slowly?	Send more slowly ( ... words per minute).	QTR	Are you going to enter dock (or port)? or Are you going to alight (or land)?	I am going to enter dock (or port). or I am going to alight (or land).
QRT	Shall I stop sending?	Stop sending.	QTS	Can you communicate with my station by means of the International Code of Signals?	I am going to communicate with your station by means of the International Code of Signals.
QRU	Have you anything for me?	I have nothing for you.	QTR	What is the correct time?	The correct time is ... hours.
QRV	Are you ready?	I am ready.	QTS	Will you send your call sign for minute(s) now (or at ... hours) [on ... kHz (or MHz)] so that your frequency may be measured?	I will send my call sign for minute(s) now (or at ... hours) [on ... kHz (or MHz)] so that my frequency may be measured.
QRW	Shall I inform ... that you are calling him on ... kHz (or MHz)?	Please inform ... that I am calling him on ... kHz (or MHz).	QTV	What are the hours during which your station is open?	My station is open from ... to ... hours.
QRX	When will you call me again?	I will call you again at ... hours [on ... kHz (or MHz)].	QTV	Shall I stand guard for you on the frequency of ... kHz (or MHz) (from ... to ... hours)?	Stand guard for me on the frequency of ... kHz (or MHz) (from ... to ... hours).
QRY	What is my turn?	Your turn is Number ... (relates to communication).	QTX	Will you keep your station open for further communication with me until further notice (or until ... hours)?	I will keep my station open for further communication with you until further notice (or until ... hours).
QRZ	Who is calling me?	You are being called by ... [on ... kHz (or MHz)].	QUA	Have you news of ... (call sign)?	Here is news of ... (call sign).
QSA	What is the strength of my signals (or those of ...)?	The strength of your signals (or those of ...) is 1. Scarcely perceptible. 2. Weak. 3. Fairly good. 4. Good. 5. Very good.	QUB	Can you give me, in the following order, information concerning: visibility, height of clouds, direction and velocity of ground wind at ... (place of observation)?	Here is the information requested ...
QSB	Are my signals fading?	Your signals are fading.	QUC	What is the number (or other indication) of the last message you received from me [or from ... (call sign)]?	The number (or other indication) of the last message I received from you [or from ... (call sign)] is ...
QSD	Is my keying defective?	Your keying is defective.	QUD	Have you received the urgency signal sent by ... (call sign of mobile station)?	I have received the urgency signal sent by ... (call sign of mobile station) at ... hours.
QSG	Shall I send ... telegrams at a time?	Send ... telegrams at a time.	QUF	Have you received the distress signal sent by ... (call sign of mobile station)?	I have received the distress signal sent by ... (call sign of mobile station) at ... hours.
QSH	What is the charge to be collected per word to ... including your internal telegraph charge?	The charge to be collected per word to ... including my internal telegraph charge is ... francs.	QUG	Will you be forced to alight (or land)?	I am forced to alight (or land) immediately. or I shall be forced to alight (or land) at ... (position or place).
QSK	Can you hear me between your signals?	I can hear you between my signals.	QUH	Will you give me the present barometric pressure at sea level?	The present barometric pressure at sea level is ... (units).
QSL	Can you acknowledge receipt?	I am acknowledging receipt.			
QSM	Shall I repeat the last telegram which I sent you, or some previous telegram?	Repeat the last telegram which you sent me [or telegram(s) number(s) ...].			
QSN	Did you hear me [or ... (call sign)] on ... kHz (or MHz)?	I did hear you [or ... (call sign)] on ... kHz (or MHz)?			
QSO	Can you communicate with ... direct or by relay?	I can communicate with ... direct (or by relay through ...).			
QSP	Will you relay to ... free of charge?	I will relay to ... free of charge.			
QSQ	Have you a doctor on board [or is ... (name of person) on board]?	I have a doctor on board [or ... (name of person) is on board].			
QSU	Shall I send or reply on this frequency [or on ... kHz (or MHz)] (with emissions of class ...)?	Send or reply on this frequency [or on ... kHz (or MHz)] (with emissions of class ...).			
QSV	Shall I send a series of V's on this frequency [or ... kHz (or MHz)]?	Send a series of V's on this frequency [or ... kHz (or MHz)].			
QSW	Will you send on this frequency [or on ... kHz (or MHz)] (with emissions of class ...)?	I am going to send on this frequency [or on ... kHz (or MHz)] (with emissions of class ...).			



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	U.S. Virgin Islands, All Calls: Virgin Islands Amateur Radio Club, GPO Box 11360, Charlotte Amalie, Virgin Islands 00801, USA	CM3,C03	QSL Bureau, Box 55, Matanzas 40100, Cuba	HJ,HK	UDRA - Santiago, Box 449-3, Santiago, Dominican Republic
	Hawaiian Islands, All Calls: QSL Bureau, Box 788, Wahiawa, HI 96786, USA	CM4,C04	QSL Bureau, Box 785, Santa Clara 50100, Cuba	HK1	Liga Colombiana de Radioaficionados (IARU member), Box 584, Bogota, Columbia
	Alaska, All Calls: Alaska QSL Bureau, 4304 Garfield St., Anchorage, AK 99503, USA	CM5,C05	QSL Bureau, Box 52, Camaguey 70100, Cuba	HK0	or Radio Club de Antioquia, Box 2500, Medellin, Colombia
	SWL - No Outgoing Service Mike Witkowski WDX9JFT, 4206 Nebel Street Stevens Point, WI 54481, USA	CM6,C06	QSL Bureau, Box 5, Santiago de Cuba 90100, Cuba	HL, HM	Liga Colombiana de Radioaficionados (IARU member), Box 6872, Cartagena, Colombia
KA	(2x2, except KA6 2x2) FEARL QSL Bureau, c/o Sam Fleming, DOL Sagami Facility, APO San Francisco 96343, USA	CM7,C07	ARRAM, Box 299, Rabat, Morocco	HL9	LCRA, Box 585, Bogota, Colombia
KA6,KR6	(2x2 calls only) Radio Society of Okinawa, PSC 560 Box 217, APO AP 96376-0217, USA	CM8,C08	Radio Club Boliviano, Box 2800, Cochabamba, Bolivia	HP	KARL, Central Box 162, Seoul 100-00, South Korea
KG4	(2x2 calls only) Guantanamo ARC, Box 73, FPO New York 09593, USA	CN	QSL Bureau, Box 1900, Cochabamba, Bolivia	HP2	American Amateur Radio Club of Korea, Box 153, APO San Francisco 96206, USA
KH2,KG6	(Guam only) MARC, Box 445, Agana, Guam 96910, USA	CP	QSL Bureau, Box 393, Santa Cruz, Bolivia	HP3	Liga Panamena de Radioaficionados (IARU member), Box 175, Panama 9A, Panama
KH3	QSL Bureau, Box 764, APO San Francisco 96305, USA	CR,CU	Rede dos Emissores Portugueses, Rua Dom Pedro V, No. 7-40, P-1200 Lisbon, Portugal	HP5	or Radio Club de Panama, Box 10745, Panama 4, Panama
KH4	QSL Bureau, Box 43, FPO AP 96515, USA	CX	Radio Club of Uruguay, Box 37, Montevideo, Uruguay	HR	Liga Panamena Radioaficionados, Box 568, Colon, Panama
KH0,KG6	(Saipan only) Box 7388 Capitol Hill, Saipan, CM 96950, USA	C2	QSL Bureau, Box 29, Nauru	HR2	c/o Esteban McKay HP3ML, Box 587, David, Chiriqui, Panama
KM6	QSL Bureau, Box 43, FPO San Francisco 96614, USA	C3	Unio de Radioaficionados Andorrans, Box 150, La Vella, Andorra	HV	or LPRA, Box 963, David, Chiriqui, Panama
AP	Pakistan Amateur Radio Society, QSL Bureau, Box 65, Lahore, Pakistan	C5	Radio Society of The Gambia, Box 2470, Serrekunda, The Gambia	H4	c/o Dr. Francisco Narvaez HP5FI, Box 153, Chitre, Panama
A2	Botswana Amateur Radio Society, QSL Bureau, Box 1873, Gaborone, Botswana	C6	Bahamas Amateur Radio Society, Box SS-6004, Nassau, Bahamas	HR	Radio Club de Honduras (IARU member), Box 0273, San Pedro Sula, Honduras
A3	Amateur Radio Club of Tonga, Box 1553, Nuku Alofa, Tonga	DA-DR	DARC Amateurfunk Zentrum, Box 1155, D-3507 Baunatal 1, Germany	HR5	or Radio Club Tegucigalpa, Box 149-C, Tegucigalpa, Honduras
A4	Royal Omani Amateur Radio Society, Box 981, Muscat, Oman	DU-DZ, 4F	PARA QSL Bureau, Box 4083, Manila, Philippines	HS	Radio Club de Honduras, QSL Bureau, Box 273, San Pedro Sula, Cortes, Honduras
A6	QSL Bureau, Box 5708, Dubai, United Arab Emirates	D4	LARCV, Box 145, Mindelo, Cape Verde	HV	c/o Noe Leopoldo Cruz HR5NC Santa Rosa de Copan, Honduras
		EA	URE, Union de Radioaficionados Espanoles, Box 220, E-28080 Madrid, Spain	H4	RAST QSL Bureau, GPO Box 2008, Bangkok, 10501 Thailand
		EI,EJ	Irish Radio Transmitters Society (IARU member), Box 462, Dublin 9, Ireland	I,I,Z	c/o Domenico Petty HV1CN, Radio Station, Vatican City
		EL,5L	Liberian Radio Amateur Association, Box 10-1477, 1000 Monrovia 10, Liberia	JA-JS	SIRS, Box 418, Honiara, Solomon Islands
		EP	Anjoman-e Radio Amateuri-e Iran Box 16765/1187, Tehran, Iran	JT	JARL, 1-14-2 Sugamo, Toshima, Tokyo, 170 Japan
		ES	QSL Bureau, Box 125, Tallinn 200090, Estonia, USSR	JW,JX	Radio Club Station JT1KAA, Box 639, Ulan Bator 13, Mongolia
		ET	ET3TRC Telecoms ARC, Box 1047, Addis Ababa, Ethiopia	JY	NRRL, Box 21, Refstad, N-0513 Oslo 5, Norway
		F	Cards for members only via REF QSL, BP 2129, F-37021 Tours Cedex, France or URC QSL Bureau, 11 Rue de Bordeaux, F-94700 Maisons-Alfort, France	J2	Royal Jordanian Radio Amateur Society, Box 2353, Amman, Jordan
		FG,FJ,FM, FP,FS,FT	Cards for members only via REF QSL, BP 2129, F-37021 Tours Cedex, France	J3	ARAD QSL Bureau, Box 1076, Djibouti, Republic of Djibouti
		FK	Cards for members only may be sent via ARANC, Box 3956, Noumea, New Caledonia	J6	QSL Bureau, Box 290, St. George's, Grenada, Windward Islands
		FO	Radio Club of French Polynesia, BP 5006, Pirae, Tahiti, French Polynesia	J7	St. Lucia ARC, Box 489, Castries, St. Lucia, Windward Islands
		FY	Cards for members only via REF QSL, BP 2129, F-37021 Tours Cedex, France or Radio Club de Guyane, Box 508, F-97300 Cayenne, French Guiana	J8	Dominica Amateur Radio Club, Box 389, Roseau, Dominica, Windward Islands
		G	RSGB QSL Bureau, Box 1773, Potters Bar, Herts EN6 3EP, England, U.K.	LA-LJ	QSL Bureau, Box 142, Kingstown, St. Vincent, Windward Islands
		GD	RSGB, c/o G.W. Ripley GD3AHV, "Corea Bungalow", Ronague Road, Ballasalla, Isle of Man, U.K.	LU	Norsk Radio Relae Liga, Box 21, Refstad, N-0513 Oslo 5, Norway
		GI	RSGB, c/o Ed-Mar 1 Onslow Drive, New Gransha Road, Bangor BT19 7HQ, Northern Ireland, United Kingdom	LX	Radio Club Argentina, Box 97, Correo Central, 1000 Buenos Aires, CF, Argentina
		GH,GJ	RSGB, c/o H.J. Chater GJ2LU, 106 Rouge Bouillon, St. Helier, Jersey	LZ	QSL Bureau, 25 rue A. Munchen, L-2172 Luxembourg, Luxembourg Central QSL Bureau, Box 830, Sofia, Bulgaria



# QSL BUREAUS

OA	Radio Club of Peru, Box 538, Lima 100, Peru	VE0,VE1,VY2	Donald Welling, VE1WF, Box 51 St. John, NB, Canada E2L 3X1	YU	SRJ, Box 48, 11001 Belgrade, Yugoslavia
OD	ARAL QSL Bureau, Box 8888, Beirut, Lebanon	VE2	A.G. Daemen VE2IJ, 2960 Douglas Avenue, Montreal, Quebec, Canada H3R 2E3	YU1	SRS, Box 64, 11001 Belgrade, Yugoslavia
OE	OE VSV QSL Bureau, Theresiengasse 11, A-1180 Vienna, Austria	VE3	The Ontario Trilliums ARC VE3TOT, Box 157, Downsview, ON, Canada M3M 3A3	YU2	SRH, Dalmatinska 12, 41000 Zagreb, Yugoslavia
OH	SRAL QSL Bureau, Box 30, SF-00381 Helsinki, Finland	VE4	Adam Romanchuck, VE4SN, 26 Morrison St., Winnipeg, MB R2B 3V4	YU3	ZRS, Box 180, 61001 Ljubjana, Yugoslavia
OK,OL	Central Radio Club, Box 69, 11327 Prague 1, Czechoslovakia	VE5	B.J. Madsen VE5FX, 739 Washington Drive, Weyburn, Saskatchewan, Canada S4H 3C7	YU4	SR BIH, Box 61, 71001 Sarajevo, Yugoslavia
ON,OR	UBA, Box 400, B-8400 Oostende 1, WV, Belgium	VE6	N.F. Waltho VE6VW, Box 1890, Morinville, Alberta, Canada T0G 1P0	YU5	SRM, Box 14, 91001 Skopje, Yugoslavia
OX	FRA, Box 1630, B-1000 Brussels, BT, Belgium	VE7	Dennis Livesey VE7DK, 8309 - 112th Street, Delta, B.C., Canada V4C 4W7	YU6	SRCG, Vaka Djurovica 20, Box 12, 81001 Titograd, Yugoslavia
	EDR QSL Central, c/o Boerge Nielsen OZ7BW, Solbjerghevedej 76, DK-8355 Ny-Solbjerg, Denmark	VE8	Rolf Ziemann VE8RZ, 2 Taylor Road, Yellowknife, NWT, Canada XIA 2K9	YU7	SRV, Lenjinov trg 10, 21000 Novi Sad, Yugoslavia
OY	OY-QSL Bureau, Box 1358, FR-110 Torshavn, Faroes (via Denmark)	VK1	QSL Bureau, GPO Box 600, Canberra, ACT 2601, Australia	YU8	SRK, Box 141, 38001 Pristina, Yugoslavia
OZ	EDR QSL Central, c/o Boerge Nielsen OZ7BW, Solbjerghevedej 76, DK-8355 Ny-Solbjerg, Denmark	VK2	QSL Bureau, Box 73, Teralba, NSW 2284, Australia	YV	Radio Club Venezolana (IARU member), Box 2285, Caracas 1010-A, DF, Venezuela or ARV QSL Bureau, Box 3636, Caracas 1010-A, DF, Venezuela
PA-PI	Dutch QSL Bureau, Postbus 330, NL-6800 AH Arnhem, Netherlands	VK3	Inwards - GPO Box 757G, Melbourne Vic 3001	ZB	Gibraltar ARS, Box 292, Gibraltar
PJ	Verona QSL Bureau, Box 3383, Willemstad, Curacao, Netherlands Antilles	VK4	Outwards - 38 Taylor St., Ashburton Vic 3147	ZC	Joint Signal Board Headquarters, British Forces Cyprus, BFPO 53, London GPO, England, U.K.
PP-PY	LABRE/DR Box 07-0004, 70-359, Brasilia, DF, Brasil	VK5	QSL Bureau, Box 10092, Gouger Street, Adelaide, SA 5000, Australia	ZD8	Ascension AR Relay League, Box 4127, Patrick AFB, Florida 32925, USA
PZ	VRAS QSL Manager, Box 566, Paramaribo, Surinam	VK6	QSL Bureau, GPO Box F319 Perth, WA 6001, Australia	ZF	Cayman Radio Society, Box 1029, Grand Cayman, British West Indies
P2	QSL Bureau, Box 141, Port Moresby, Papua New Guinea	VK7	QSL Bureau, GPO Box 371D, Hobart, Tasmania 7001, Australia	ZK1	QSL Bureau, Radio Station Rarotonga, Rarotonga, Cook Islands, New Zealand
P4	Aruba Amateur Radio Club QSL Bureau, Box 2273, San Nicolas, Aruba	VK8	QSL Bureau, c/o H.G. Andersson VK8HA, Box 619, Humpty Doo, NT 0836, Australia	ZK2	QSL Bureau, Box 37, Niue, South Pacific
		VK9,VK0	QSL Bureau, c/o Neil Penfold VK6NE, 2 Moss Court, Kingsley, WA 6026, Australia	ZL	NZART, Box 857, Wanganui, New Zealand
R,U	Central Radio Club, Box 88, Moscow, USSR Moscow stations only: Moscow City Radio Club, Prospekt Vernadskogo 9/10, Moscow 117311, USSR	VO1,VO2	CRRL VO QSL Bureau, Box 6, St. John's, Newfoundland, Canada A1C 5H5	ZP	Radio Club Paraguayo, Casila de Correo 512, Asuncion, Paraguay
RB,UB,RT, UT,UY	QSL Bureau, Box 56, Kiev 252001, Ukraine, USSR	VP2M	Montserrat Amateur Radio Society, Box 448, Plymouth, Montserrat	ZR-ZS	Cards for members only via SARL, Box 807, Houghton 2041, TV, Rep. of South Africa
RC,UC	Chernobyl QSL Bureau, Box 17 Minsk 220012, Byelorussia, USSR	VP2V	B.V.I. QSL Bureau, Box 653, Road Town, Tortola, British Virgin Islands, Leeward Islands	Z2	RSZ QSL Manager, Box 2377, Harare, Zimbabwe
RD,UD	QSL Bureau, Box 165, Baku-Center 370000, Azerbaijan, USSR	VP5	TACARS, Box 108, Providenciales, Turks and Caicos Islands, British West Indies	3A	ARM, Box 2, MC-98001 Monaco Cedex or c/o Director Generale des Telecoms, 16 Boulevard de Suisse, Monaco
RF,UF	QSL Bureau, POB 10, 38400 Kutaisi City, Georgia or GNRC, POB 123, Tbilisi 380004, Georgia or FWWRC, POB 1, Tbilisi 380002, Georgia	VP8	Falkland Islands Radio Club, Box 260, Mount Pleasant Airport, Falkland Islands	3B6-3B9	Mauritius ARS, Box 467, Port Louis, Mauritius
RG,UG	QSL Bureau, Prospekt Ojonikidze 5, Yerevan 375000, Armenia, USSR	VP9	Radio Society of Bermuda, Box HM 275, Hamilton HM AX, Bermuda	3DA	Radio Society of Swaziland, Box 64, Manzini, Swaziland
RH,UH	QSL Bureau, Box 224, Ashkhabad 744014, Turkmen, USSR	VQ9	QSL Bureau, Diego Garcia ARC, Box 16, NSF, FPO San Francisco 96685, USA	3D2	QSL Bureau, Box 184, Suva, Fiji Islands
RM,UM	QSL Bureau, Box 392, Frunze 720055, Kirghiz, USSR	VS6	Cards for members only via HARTS, Box 541, Hong Kong	4K	Central Radio Club, Box 88, Moscow, USSR
RP,UP	QSL Bureau, Box 1000, Vilnius 232001, Lithuania, USSR	VU	Amateur Radio Society of India, (IARU member), ARA, Box 4015, New Delhi 110017, India	4S	Radio Society of Sri Lanka, QSL Manager, Box 907, Colombo, Sri Lanka
RR,UR	QSL Bureau, Box 125, Tallinn 200090, Estonia, USSR	VY1	CRRL QSL Bureau, W.L. Champagne VY1AU, Box 4597, Whitehorse, YT, Canada Y1A 2R8	4U11TU	International ARC, Box 6, CH-1211 Geneva 20, Switzerland
SA-SM	SSA, Ostmarksgatan 43, S-12342 Farsta, Sweden	V2	QSL Bureau, Box 1111, St. John's, Antigua, Leeward Islands	4X,4Z	IARC, Box 17600 Tel Aviv 61176, Israel
SN-SQ	PZK QSL Bureau, skrytka pocztowa 320, 00-950 Warsaw 1, Poland	V7	Kwajalein Amateur Radio Club, Box 444, APO San Francisco 96555, USA	5A	QSL Bureau, Box 372, Tripoli, Libya
ST,6T,6U	Sudan Radio Club, Box 80, El Morada, Omdurman, Republic of the Sudan	XE	FMRE (IARU member), Box 907, 06000 Mexico, DF, Mexico	5B	Cyprus Amateur Radio Society, Box 1267, Limassol, Cyprus
SU	EARS, Ramsis Bldg., Floor 13 Flat 10, 6 Ramsis Square, Cairo 11111, Egypt	XX	Cards for members only via HARTS, Box 541, Hong Kong	5N	Nigerian Amateur Radio Society, Box 2873, Lagos, Nigeria
SV	RAAG, Box 3564, GR-10210 Athens, Greece	YB-YH	ORARI National QSL Bureau, Box 96, Jakarta, Indonesia 10002	5R	QSL Bureau, Box 587, Tananarive, Madagascar
S2	Bangladesh Amateur Radio League, GPO Box 3512, Dacca, Bangladesh	YB1-YH1	QSL Bureau, Box 314, Bandung, Indonesia	5W	Western Samoa Radio Club, QSL Bureau Secretary, Box 1069, Apia, Western Samoa
S7	QSL Bureau, c/o R.C. Barnes S79D, Box 191, Victoria Mahe, Seychelles	YB2-YH2	Daerah Istermewa Yogyakarta, Box 27, Yogyakarta 55001, Indonesia	5Z	RSK QSL Bureau, Box 45681, Nairobi, Kenya
S8	Transkei Amateur Radio League, Box 821, Umtata, Transkei		Central Java, Northern Area: QSL Bureau, Box 88, Semarang 50001, Indonesia	6W	ARAS, Box 971, Dakar, Senegal
TA-TC	TRAC QSL Bureau, Box 109, Sirkeci 34432, Istanbul, Turkey		Central Java, Southern Area: QSL Bureau, Box 73, Solo, Indonesia	6Y	JARA QSL Manager, Red Cross Building, 76 Arnold Rd., Kingston 5, Jamaica
TF	IRA QSL Bureau, Box 1058, 121 Reykjavik, Iceland	YB3-YH3	QSL Bureau, Box 59, Surabaya, Indonesia	7J	JARL, 1-14-2 Sugamo, Toshima, Tokyo, 170 Japan
TG	Crag, Box 115, Guatemala City, Guatemala	YB4-YH4	c/o Johannes Titaley YB4GA, GG Sumatra B-5 Palembang, Indonesia	7P	Lesotho ARS, Box 949, Maseru 100, Lesotho
TE TI	Radio Club of Costa Rica, Box 2412, San Jose 1000, Costa Rica	YB6-YH6	QSL Bureau, Box 666 Medan, North Sumatera, Indonesia	7Q	c/o H.Y. Bvumbwe 7Q7AE, Box 24, Blantyre, Malawi
TK,FC	Cards for members only via REF QSL, BP 2129, F-37021 Tours Cedex, France	YB0-YH0	ORARI Daerah Jakarta, P.O. Box 84, JKWK, Jakarta 10001, Indonesia	7X	ARA QSL Service, Box 2, Algiers, Algeria
TN	QSL Bureau, Box 2239, Brazzaville, Congo	YI	Baghdad Radio Club, Box 7361, Baghdad, Iraq	8P	Radio Society of Barbados, Box 814E, Bridgetown, Barbados
TR	Association Gabonaise des Radio-Amateurs, Box 1826, Libreville, Gabon	YJ	Vanuatu Amateur Radio Society, Box 50, Port Vila, Vanuatu	8R	c/o Syd. C.H. D'Orrnellas, 110 Barrack Street, Kingston, Georgetown, Guyana
TU	Association des Radio Amateurs Ivoiriens, 01 BP 2946, Abidjan 01, Ivory Coast	YK	Technical Institute of Radio, Box 245, Damascus, Syria	9H	MARL (IARU member), Box 575, Valletta, Malta or AREC, Box 114, Valletta, Malta
TV-TX	Cards for members only via REF QSL, BP 2129, F-37021 Tours Cedex, France	YL	QSL Bureau, Box 164, Riga 226098, Latvia, USSR	9H4	c/o Eric Rogers 9H4G, Dar Ghali-Kwiet, Ghajn Melet St., Zebug, Gozo, Malta
T7	ARRSM QSL Bureau, Box 77, RSM-47031 Rep. of San Marino (Italy)	YN,HT	QSL Bureau, Box 925, Managua, Nicaragua or Mike Murciano, Box 140902, Coral Gables, Florida 33114, USA	9I,9J	Radio Society of Zambia, Box 20332, Kitwe, Zambia
VE,VO,VY	CRRL Central QSL Bureau, Box 51, St. John, NB, Canada E2L 3X1 Outgoing only: CARF National QSL Bureau, Box 66, Islington, Ontario, Canada	YO	or Alberto Matamoros, Box 1474, Managua, Nicaragua	9K	Kuwait Amateur Radio Society, Box 5240, Code 15053 Safat, Kuwait
		YS	Federatia Romana de Radioamatorism, Box 22-50, R-71100 Bucharest, Romania	9L	Sierra Leone ARS, Box 10, Freetown, Serra Leone
			Cards for members only via CRAS, Box 517, San Salvador, El Salvador	9M2,9M6, 9M8	MARTS, Box 10777, 50724 Kuala Lumpur, Malaysia
				9V	SARTS, GPO Box 2728, Singapore 9047
				9Y	Trinidad & Tobago Amateur Radio Society, Box 1167, Port-of-Spain, Trinidad
					The Yasmie Foundation, Box 2025, Castro Valley, CA 94546, USA

# PREFIXES – BY COUNTRIES

Country	Zone	Prefix	Country	Zone	Prefix	Country	Zone	Prefix
Afghanistan	21	YA	Graham Land	13	LU, VP8	Panama	7	HP
Agalega Is.	39	3B6	Greece	20	SV	Pantelleria Is.	33	IH
Aland Is.	15	OH0	Greenland	40	OX	Papua New Guinea	28	P2
Alaska	1	KL7	Guadeloupe	8	FG	Paraguay	11	ZP
Albania	15	ZA	Guam	27	KH2	Peru	10	OA
Algeria	33	7X	Guantanamo Bay	8	KG4	Philippines	27	DU-DZ 4F
Amsterdam & St. Paul Is.	39	FT8Z	Guatemala	7	TG	Pitcairn Is.	32	VR6
Andaman & Nicobar Is.	26	VU7	Guernsey, Bailiwick of	14	GU	Poland	15	SP
Andorra	14	C3	Guinea-Bissau	35	J5	Portugal	14	CT
Angola	36	D2, D3	Guinea	35	3X	Prince Edward Is. (Canada)	5	VE1, VY2
Aran Is.	14	EJ0	Guyana	9	8R	Prince Edward & Marion Is.	38	ZS2
Argentina	13	LU				Puerto Rico	8	KP4
Aruba	9	P4						
Ascension Is.	36	ZD8	Hawaii	31	KH6			
Auckland Is.	32	ZL	Haiti	8	HH	Qatar	21	A7
Australia	29, 30	VK	Heard Is.	39	VK0			
Austria	15	OE	Honduras	7	HR	Reunion Is.	39	FR
Aves Is.	8	YV	Hong Kong	24	VS6	Revilla Gigedo Is.	6	XF4
Azores Is.	14	CU	Howland Is.	31	KH1	Rodriguez Is.	39	3B9
			Hungary	15	HA, HG	Romania	20	YO
						Rota Is.	27	KH0
Bahama Is.	8	C6				Rotuma	32	3D2
Bahrain	21	A9	Iceland	40	TF	Rwanda	36	9X
Baker Is.	31	KH1	India	22	VU			
Balearic Is.	14	EA6	Indonesia	28	YB, YC, YD	Sabah	28	9M6
Banaba	31	T33	Iran	21	EP	Saba Is.	8	PJ
Bangladesh	22	S2, S3	Iraq	21	YI	St. Barthelemy	8	FJ
Barbados	8	8P	Ireland	14	VI	St. Brandon Is.	39	3B7
Belgium	14	ON	Ischia	15	IC	St. Helena Is.	36	ZD7
Belize	7	V3	Isle of Man	14	GD	St. Martin Is.	8	FS
Benin	35	TY	Israel	20	4X, 4Z	St. Peter & St. Paul Rocks	11	PV0
Bermuda Is.	5	VP9	Italy	15	I-Z	St. Pierre & Miquelon Is.	5	FP
Bhutan	22	A5	Ivory Coast	35	TU	Salpan Is.	27	KH0
Bolivia	10	CP				Samoa, American	32	KH8
Bonaire	9	PJ	Jamaica	8	6Y	Samoa, Western	32	5W
Bosnia & Herzegovina	15	YT4, YU4, YZ4	Jan Mayen Is.	40	JX	San Andres & Providencia Is.	7	HK0
Botswana	38	A2	Japan	25	JA-JS, 7J, 8J	San Felix Is.	12	CE0X
Bouvet Is.	38	3Y	Japan, U.S. Personnel in	25	KA	San Marino	15	T7
Brazil	11	PP-PY	Jarvis Is.	31	KH5	Sao Tome & Principe	36	9M8
Brunei	28	V8	Jersey	14	GJ	Sarawak	28	9M8
Bulgaria	20	LZ	Johnston Is.	31	KH3	Sardinia	15	IS
Burkina-Faso	35	XT	Jordan	39	JY	Saudi Arabia	21	HZ, 7Z
Burundi	36	9U	Juan de Nova Is.	39	FR	Scotland	14	GM
			Juan Fernandez Is.	12	CE0Z	Senegal	35	6W
						Seychelles	39	S79
Cambodia	26	XU	Kenya	37	5Z	Sicily	15	IT
Cameroon	36	TJ	Kerguelen Is.	39	FT8X	Sierra Leone	35	9L
Campbell Is.	32	ZL	Kermadec Is.	32	ZL	Singapore	28	9V
Canada	1, 2, 3, 4, 5	VE	Kiribati	31	T3	Sint Eustatius	8	PJ
Canary Is.	33	EA8	Korea	25	HL, HM	Sint Maarten Is.	8	PJ
Cape Verde	35	D4	Kure Is.	31	KH7	Slovenia	15	YT3, YU3, YZ3
Capri Is.	15	IC	Kuwait	21	9K	Solomon Is.	28	H4
Cayman Is.	8	ZF				Somalia	37	T5
Central African Republic	36	TL	Labrador (Canada)	2	V02	South Africa, Rep. of	37	ZR, ZS
Ceuta & Melilla (Spain)	33	EA9	Laccadive Is.	22	VU7	South Georgia Is.	13	VP8
Chad	36	TT	Lampedusa Is.	22	IG	South Orkney Is.	13	LU, VP8
Chagos	39	V09	Laos	26	XW	South Sandwich Is.	13	LU, VP8
Chatham Is.	32	ZL	Latvia	15	UQ, YL	South Shetland Is.	13	CE9, LU, VP8
Chile	32	CE	Lebanon	20	OD	Spain	14	EA
China	23, 24	B	Leeward Is.			Sri Lanka	22	4S
Christmas Is.	29	VK9X	Anguilla	8	VP2E	Sudan	34	ST
Clipperton Is.	7	FO	Antigua	8	V2	Surinam	9	PZ
Cocos Is.	7	T19	British Virgin Is.	8	VP2V	Svalbard Is.	40	JW
Cocos (Keeling) Is.	29	VK9Y	Montserrat	8	VP2M	Swan Is.	7	HR0
Colombia	9	HK	St. Kitts, Nevis	8	V4	Swaziland	38	3DA0
Commonwealth of Independent States			Lesotho	38	7P	Sweden	14	SJ-SM
Russian Federation	16, 17, 18, 19	UA, UN, UV, UW, UZ	Liberia	35	EL, 5L	Switzerland	14	HB
Armenia	21	UG	Libya	34	5A	Syria	20	YK
Azerbaijan	21	UD	Liechtenstein	14	HB0			
Belarus	16	UC	Lithuania	15	UP, LY	Taiwan	24	8V
Kazakh.	17	UL	Lord Howe Is.	30	VK2	Tanzania	37	5H3
Kyrgyzstan	16	UM	Luxembourg	14	LX	Thailand	26	HS
Moldova	16	UO				Tinian	27	KH0
Tajikistan	17	UJ	Macao	24	XX	Togo	35	5V
Turkmenistan	17	UH	Macquarie Is.	30	VK0	Tokelau Is.	31	ZK3, ZM7
Ukraine	16	UB, UT, UY	Madagascar	39	5R	Tonga Is.	32	A3
Uzbek	17	UI	Maddalena Is.	15	IM	Transkei	38	S8
Comoros	39	D6	Madeira Is.	33	CT3	Trinidad & Tobago Is.	11	PV0
Congo	36	TN	Malawi	37	7Q	Trinidad & Tobago Is.	9	9Y
Conway	32	3D2	Malaysia, West	28	9M2	Tristan da Cunha Is.	38	ZD9
Cook Is.	32	ZK1	Maldives Is.	22	8Q	Tromelin Is.	39	FR
Corsica	15	TK	Mali	35	TZ	Tunisia	33	3V
Costa Rica	7	T1	Malpelo	9	HK0	Turkey	20	TA-TC
Crete	20	SV9	Malta	15	9H	Turks & Caicos Is.	8	VP5
Croatia	15	YT2, YU2, YZ2	Malyi Vysotskiy Is.	16	4J	Tuscan Archipelago	15	JA
Crozet Is.	39	FT8W	Maniki	32	KH1	Tuvalu Is.	31	T2
Cuba	8	CM, CO	Mariana Is.	27	XK0			
Curacao	9	PJ	Market Reef	15	OJ0	Uganda	37	5X
Cyprus	20	ZC, 5B	Marshall Is.	31	V7	United Arab Emirates	21	A6
Czechoslovakia	15	OK, OL	Martinique	8	FM	United Nations	5, 14	4U
			Mauritania	35	5T	United States of America	1, 3, 4, 5, 31	A, K, N, W
			Mauritius Is.	39	3B8	Uruguay	13	CX
Denmark	14	OZ	Mayotte	39	FH			
Djibouti	37	J2	Mexico	6	XE, XF	Vanuatu	32	YJ
Dodecanese Is.	20	SV5	Midway Is.	31	KH4	Vatican City	15	HV
Dominican Republic	8	HI	Minami-Tori-Shima	27	JD1	Venezuela	9	VV
			Monaco	14	3A	Vietnam	26	3V
Easter Is.	12	CE0A	Mongolia	23	JT	Virgin Is. (British)	8	VP2V
Ecuador	10	HC	Morocco	33	CN	Virgin Is. (U.S.)	8	KP2
Egypt	34	3S	Mozambique	37	C8, C9			
El Salvador	14	YS	Myanmar	26	XZ			
England	14	G						
Equatorial Guinea	36	3C	Namibia	38	V5	Wake Is.	31	KH9
Estonia	15	UR, ES	Nauru	31	C2	Wales	14	GW
Ethiopia	37	ET	Navassa Is.	8	KP1	Wallis & Futuna Is.	32	FW
			Nepal	22	9N	Walvis Bay	38	ZS9
Faroe Is.	14	OY	Netherlands	14	PA-PJ	Western Sahara	33	50
Falkland Is.	13	YP8	Netherlands Antilles	8, 9	PJ	Willis Is.	30	VK9Z
Fed. States of Micronesia	27	V6	New Caledonia	32	FK	Windward Is.		
Fernando de Noronha	11	PV0	Newfoundland (Canada)	5	V01	Dominica	8	J7
Fiji Is.	32	3D2	New Zealand	7	YN	Grenada	8	J3
Finland	15	OH	Nicaragua	7	5U	St. Lucia	8	J6
France	14	F	Niger	35	5U	St. Vincent, Grenadines	8	J8
French Guiana	9	F	Nigeria	35	5N			
French Polynesia	31, 32	FO	Niue Is.	32	ZK2	Yemen	21	70
			Norfolk Is.	32	VK9N	Yugoslavia	15	YU
			Northern Ireland	14	GI	Yukon Territory (Canada)	1	VY1
			Norway	14	LA-LJ			
Gabon	36	TR				Zaire	36	9Q
Galapagos Is.	10	HC8	Ogasawara Is.	27	JD1	Zambia	36	9I, 9J
Gambia, The	35	C5	Okinawa (Ryukyu Is.)	25	JR6	Zanzibar (Tanzania)	37	5H1
Georgia	21	RF, UF	Oman	21	A4	Zimbabwe	38	Z2
Germany	14	DA-DP						
Ghana	35	9G	Pakistan	21	AP			
Gibraltar	14	ZB2	Palmyra Is.	31	KH5			
Glorioso Is.	39	FR						
Gough Is.	38	ZD9						
Gozo (Malta)	15	9H4						





# RADIO AMATEURS OPERATING WITH RECIPROCAL LICENSES

## Foreign

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 BV/JPIRIW K. Hoshino, P.O. Box 7-94 Hsintien, Taiwan, Republic of China  
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 C6/WA20WL Leslie R. Hinds, Lucayan Towers North, Box F-285, Freeport, GB, Bahama Islands  
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 DU/K4YT Karl Renz, U.S. Embassy, Manila, APO San Francisco 96528, USA  
 DU/KZ5Z Jonathan V. Lofton, American Embassy - ATO, Manila, Philippines  
 DU/WB5LBJ Clarence E. Green, 190 R. Mapa Street, Tabucan, Mandurriao, Iloilo City 5901, Philippines  
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 DU/N6XRU William E. Wanamaker, USAID/Manila, APO San Francisco 96528, USA  
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 DU/N7GCN Martha A. Ming, APTS General Delivery, Baguio City 2600, Philippines  
 DU/N7GCC James M. Ming, APTS General Delivery, Baguio City 2600, Philippines  
 DU/N7MUX Jerry R. Dunham, P.O. Box 121, Legazpi City 4500, Philippines  
 DW/KAT5FR Daniel N. Law, Silliman University, Dumaguete City 6501, Philippines  
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 EA/W5YZY W.E. Day, Urb La Huerta, C/Laurel 1, 03112 Tangel (Alicante)  
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 EA6/G6ZY Stanley Ingram, Box 89, Santa Eulalia, Ibiza, Balearic Islands, Spain  
 EA7/N5OKR Grey R. Altig, PSC 818 Box 1147, FPO AE 09644-5000  
 F/G2BNI Douglas B. Drage, The Anchorage, Les Vignes du Bessard, F-74320 Sevrier, France  
 F/G0KSW Karl A. Barth, 9 Square Marcel Proust, F-78120 Rambouillet, France  
 F/WU2J Byron Weaver, 8 Rue la Perouse, F-66290 Cerbere, France  
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 FR/W6KG YASME, Box 2025, Castro Valley, CA 94546, USA  
 FR/W6QL YASME, Box 2025, Castro Valley, CA 94546, USA  
 FS/FG5EM Morton Bardfield, QSL via W3HNK  
 FS/FG5EO Walter Brenner, QSL via DJ0FX  
 FS/FG0VG Walter Brenner, QSL via DJ0FX  
 FY/KD3FK Beth L. Weaver, No. 35 bis Cit Cesaire, 97300 Cayenne, French Guiana  
 FY/N4QDX Jay R. Weaver, No. 35 bis Cite Cesaire, 97300 Cayenne, French Guiana  
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 G/KK6EE Vittorio G. Civita, 1 Crossway, Lewes, Sussex BN7 1NE, England, UK  
 G/N0BZ Thomas John Tobiasen, Applegarth, Manse Lane, Knaresboro, N. Yorks HG5 8LF, England, UK  
 GW/N2ATT Taizo Arakawa, 5 St. Johns Close, Hawarden, Deeside, Clwyd, CH5 3QU, U.K.  
 HB0/HB9NL Frank A. Acklin, Sonnenrainstr. 27 CH-6233 Buiron, Switzerland  
 HB9/CU2BR Alfred A. Potthoff, Berg Str. 17, CH-8707 Uetikon am See, Switzerland  
 HB9/NIFEY Joseph S. Johnson, Alte Lanstr. 17, CH-8802 Kilchberg, Switzerland  
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 HC/KAS0SYR Jose Wells J., Box 52, Santo Domingo, Ecuador  
 HC/KAS0TBS Sylvia Smith D., Box 52, Santo Domingo, Ecuador  
 HI/N9HBQ Robert Boomer, Paseo de la Laguna 10, Costambar, Puerto Plata, RD, Dominican Republic  
 HI/VE3LKU Douglas G. Crowe, Box 1157, Santo Domingo, Dominican Republic  
 HK/CE3FQT Carlos Acevedo Alvarado, Box 1025, Bogota, Colombia  
 HK/CE3JWE Jaime E. Bobillier, Box 91294, Bogota, Colombia  
 HK/HB0DX Gene Shannon B., Box 27744, Bogota, Colombia  
 HK/KC4AN Galen Ray Stutzman, Box 27744, Bogota, Colombia  
 HK/K0LWJ Raymond S. Rising, Instituto Linguistico deVerano, Box 27744, Bogota, Colombia  
 HK/N4HUF Macon G. Hare, Calle 43 31-29, Villavicencio, Colombia  
 HK/SM5HV C. Otto Ringheim, Box 2195, Bucaramanga, Colombia  
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 HK/WA3HOV Serge S. Krikorian Jr., Box 27744, Bogota, Colombia  
 HK/WB0DTP Henry L. Cook, Liga Colombiana de Radioaficionados, Box 584, Bogota, Colombia  
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 HP4/TI2LAK Dr. Luis Antonio Altamar J., P.O. Box 71690, San Jose, Costa Rica  
 HR/WB5YWU Gary S. Kesler, Minas de Oro, Comayagua, Honduras  
 HR/W6QL YASME, Box 2025, Castro Valley, CA 94546, USA  
 HR2/JA9WFM Hiro Nakamura, A Postal 2039, San Pedro Sula, Cortes, Honduras  
 JT/HA7VQ Pashkue Tiborne, QSL via JT Bureau  
 JT/OK1XC Mikshatko Iosef, QSL via JT Bureau  
 JT/RA6LEV V.V. Mordovin, QSL via JT Bureau  
 JT/RB5LTK V.V. Strimovskii, QSL via JT Bureau

## Foreign

JT/RB5LUK A.S. Delimarskii, QSL via JT Bureau  
 JT/RB3MR V.V. Gurkin, QSL via JT Bureau  
 JT/RA6LEV V.V. Mordovin, QSL via JT Bureau  
 JT/UA3EC Gennadi Lysac, QSL via JT Bureau  
 JT/UL7QC A.B. Ovechkin, QSL via JT Bureau  
 JW/LB6DC Kristoffer H. Kvello, Vei 214 5, N-9170 Longyearbyen, Svalbard Island, Norway  
 JW/LB6EC Thor Ore Bendiksen, Box 516, N-9170 Longyearbyen, Svalbard Island, Norway  
 JW/LB6FC Trond Sigernes, Vei 230 31, N-9170 Longyearbyen, Svalbard Island, Norway  
 J6/OE2CHN Christian Hohenwallner, QSL via OE2GEN  
 KA1HL/VE3 Arnold M. Fine, 919 Kirkwood Ave, Ottawa, Ontario, Canada K1Z 5Y6  
 OE/SP5IXI Mirosław Rozbicki, QSL via VK3DXI  
 OH/G4JVG QSL via G Bureau  
 OH/K5HGX John M. Knight, P.O. Box 525, Florissant, CO 80816-0525  
 PA/DF4NP Ursula Roesler, Het Wedde 8, NL-2253 RE, Voorschoten, Netherlands  
 PA/DL8RH Hans Werner Roesler, Het Wedde 8, NL-2253 RE Voorschoten, Netherlands  
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 PA/KB1IA J. Brad Lentz, Garstkampsstr. 11, NL-6611 KS Overasselt, Netherlands  
 PA/SM6CPI Kjell W. Strom, Box 597, NL-2030 Hoofddorp, Netherlands  
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 PY/WA3MJR F.E. Vidal, Ave. Santa Marina 1588, Agua Branca, 05036 Sao Paulo, SP, Brazil  
 PZ/W6KG YASME, Box 2025, Castro Valley, CA 94546, USA  
 P4/N4XCF Danny Swafford, Box 2209, San Nicolaas, Aruba  
 SM/VK5CQ C.M. Waite, QSL via WA3JWF  
 SM/9M2CR Colin Richards, Sandvik 29, 640 20 Björkvik, Sweden  
 SV/W6KG YASME, Box 2025, Castro Valley, CA 94546, USA  
 SV/W6QL YASME, Box 2025, Castro Valley, CA 94546, USA  
 S7/W6KG YASME, Box 2025, Castro Valley, CA 94546, USA  
 S7/W6QL YASME, Box 2025, Castro Valley, CA 94546, USA  
 S8/W6KG YASME, Box 2025, Castro Valley, CA 94546, USA  
 S8/W6QL YASME, Box 2025, Castro Valley, CA 94546, USA  
 TA/W8BANI Stephen L. Webb, Box 2283, APO New York 09224, USA  
 TG/KD5HA Judith A. Harper, Salon del Reino, Panajachel, Solola, Guatemala  
 TI/H8AJD Andres J. Dujarric, Box 130, Centro Colon, San Jose, Costa Rica  
 TI/H8MWD Myriam Dujarric, Box 130, Centro Colon, San Jose, Costa Rica  
 TI/LU1JMQ Maria E. Alvarez, Box 79-2030, San Jose, Costa Rica  
 TI/W6KG YASME, Box 2025, Castro Valley, CA 94546, USA  
 VE2/CE2JG Pedro Fernandez, Box 252, Laval, Quebec, Canada H7M 3N9  
 VE3/JA3PJ Ryo Onishi, 15 Mullet Road, Willowdale, Ontario M2M 2A7, Canada  
 VE3/OK3CAW Marvin Hlavac, 147 Mavety St, Toronto, Ontario, Canada M6P 2L8  
 VP2/W6KG YASME, Box 2025, Castro Valley, CA 94546, USA  
 VP2E/AA1M Robert Reiser, QSL via AA1M  
 VP2E/JH4IFF Mitsumasa "Mitsu" Uto, QSL via JH4IFF  
 VP2E/KA3DBN John Rouse, QSL via KA3DBN  
 VP2E/KB2JXG Catherine Burke, QSL via KB2JXG  
 VP2E/KB4VHW Robert C. Ave, QSL via KB4VHW  
 VP2E/KB8WC John Bricker, QSL via KB8WC  
 VP2E/KD6WW Bruce D. Lee, QSD via KD6WW  
 VP2E/KO80 Scott Farnham, QSL via KO80  
 VP2E/KT8Y Thomas Auth, QSL via KT8Y  
 VP2E/K8BL Robert Liddy, QSL via K8BL  
 VP2E/NOLMD John O. Stewart, QSL via NOLMD  
 VP2E/NR1R Reynolds A. Sylvester, Jr., QSL via NR1R  
 VP2E/N2FBB Robert Reiman, QSL via N2FBB  
 VP2E/N4BWS Terrell Moore, QSL via N4BWS  
 VP2E/W2ORA Joseph D. Duffin, QSL via W2ORA  
 VP2E/W2PAU Edwin M. Brown, QSL via W2Pau  
 V2/KA2DIV Grant Mitchell, QSL via KA2DIV  
 V2/OE2CHN Christian Hohenwallner, QSL via OE2EJN  
 W2CIH/VE3 Norman A. Champness, 216 Raymond Ave., London, Ontario, Canada N6A 2N1  
 YS/WD4IFN Herman H. Franke, QSL via WD4IFN  
 YV/HI8CVR Nidia Virella, Box 20, Punto Fijo 4102, Falcon, Venezuela  
 YV/K3UOC Mike Manafa, QSL via W1AF  
 YV/KD4AHI Marie C. Parraga, Box 2279, Maracay 2101-A, Venezuela  
 YV/K4MUP Earle Findley, Apto. 134, Anaco, Anz., Venezuela  
 YV/OA4AUN Maria Maica Cordova de Orihuela, Box 73, Puerto Ordaz 8015-A, Bolivar, Venezuela  
 YV/W8PLV Henry E. Gorney, Box 70184, Caracas 1071, DF, Venezuela  
 ZB2/G4HUA T.S. Eilam, QSL via VE6SH  
 ZP/W6QL YASME, Box 2025, Castro Valley, CA 94546, USA  
 ZP9/DL3RO Johann Reisser, P.O. Box 512, Asuncion, Paraguay  
 ZS/W6KG YASME, Box 2025, Castro Valley, CA 94546, USA  
 ZS3/W6QL YASME, Box 2025, Castro Valley, CA 94546, USA  
 Z2/W6QL YASME, Box 2025, Castro Valley, CA 94546, USA  
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# RADIO AMATEURS OPERATING WITH RECIPROCAL LICENSES

## Foreign

4S/JA8DOK  
S7/DF5UG  
4S/DJ8CV  
4S/DK1ZN  
4S/DK2SC

4S/WB7VR  
4X/W6KG  
5A/G3JKI  
5N/DC6GW  
5N/DJ9FH  
5N/DK3LQ  
5N/DL5KBK  
5N/DL5NE  
5N/EI6FM

5N/EL2AY  
5N/FC1LIA  
5N/FE6HCL  
5N/G3GJQ  
5N/G3SXX  
5N/G3ZMP  
5N/G4WOB  
5N/G8WTR  
5N/HB9CUZ  
5N/HB9KC  
5N/I1CSJ  
5N/IK1FOS  
5N/IK7EJX

5N/JG1FVZ  
5N/K0LXA  
5N/KA0KIA  
5N/KB7ZT  
5N/KC7RD  
5N/LU9EAG  
5N/N4NW  
5N/OE1YDA  
5N/OE5SYM  
5N/OE5WRL  
5N/OK1AEX  
5N/OK1DJ0  
5N/OK1ZKA  
5N/ON7VD  
5N/PB0ACP  
5N/TU2HS  
5N/TU2NL  
5N/TZ6WC  
5N/VY1AA  
5N/W4LZZ  
5N/W0PBV  
5N/YU3IK  
5N/YU7SC  
5N/4X4FF  
5N/5B4MV  
5N/9G1JH  
5N/9LU9EAG  
6Y/KB4ZBK  
6Y/KC4ADR  
6Y/W3FAJ  
6Y/OE2CHN  
8R/HI8XAD  
8R/LU9CAM  
8R/W1CDC  
8R/N3BBT  
8R/WA4YYG  
9M2/KA1BWF  
9N/W6KG  
9N/W6QL  
9Y/J6LAD  
9Y/OE2CHN  
9Y4/JA2EZD

Kazunori Miyatake, QSL via JA8RUZ  
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Christian Hohenwallner, QSL via OE2CHN  
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W1/LU9DDN  
W1/PU1AIL  
W1/PU1AKP  
W1/PU1AKQ  
W1/VK2JBM  
W2/CE3CRA  
W2/F2YS  
W2/HI3JTE  
W2/HI3VAR  
W2/HI8CAO  
W2/HK1AHR  
W2/JS1DLC  
W2/VK2DXI  
W2/YU2WX  
W2/4X6MQ  
W3/H4CP  
W3/SM6NCT  
W4/DJ3YT  
W4/DJ8XU  
W4/EA4DDJ  
W4/HI8RFA  
W4/HK3GZB  
W4/HK3HCJ  
W4/LU4DUZ  
W4/OZ7SM  
W4/TF3KX  
W4/YSIJCR  
W4/6Y5AM  
W4/PY2ZEA  
W4/YS1AF  
W4/4X1AD  
W5/DL2HI  
W5/LU3EHT  
KG6/OE6BVG  
KH6/OE2CHN  
KH6/VK2DXI  
W6/CX7CB  
W6/G3MHV  
W6/G3NBZ  
W6/JA1WZV  
W6/LU4DMI  
W6/LU6AND  
W6/LU8EDU  
W6/OE2CHN  
W6/OE6BVG  
W6/TG9EM  
W6/TG9JH  
W6/VK2KS  
W6/4X6MQ  
W7/DL1UF  
KH8/OE2CHN  
W8/JR1COO  
KH0/JG1RVN  
KH0/OE6BVG  
VE2AQS/W6  
VE2QB/W4  
VE3BMV/W2  
VE3EKH/W5  
VE3SUN/W6  
VE7GDM/W0

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## THIRD-PARTY TRAFFIC

The U.S. Federal Communications Commission defines third-party traffic [Part 97.3 (a)(38)] as: "A message from the control operator (first party) of an amateur station to another amateur station control operator (second party) on behalf of another person (third party)." U.S. amateurs are only permitted to handle such traffic with countries having third-party agreements with the United States.

The following is a current list of these countries:

V2	Antigua & Barbuda	YS	El Salvador	XE	Mexico
LU	Argentina	V6	Federated States of Micronesia	YN	Nicaragua
VK	Australia			HP	Panama
V3	Belize	9G	Ghana	ZP	Paraguay
CP	Bolivia	J3	Grenada	OA	Peru
PP-PY	Brazil	TG	Guatemala	DU	Philippines
VE	Canada	8R	Guyana	V4	St. Kitts-Nevis
CE	Chile	HH	Haiti	J6	St. Lucia
HK	Colombia	HR	Honduras	J8	St. Vincent
D6	Comoros	4X,4Z	Israel	9L	Sierra Leone
TI	Costa Rica	4U1ITU	ITU, Geneva	3D6	Swaziland
CM,CO	Cuba	4U1VIC	ITU, Vienna	C5	The Gambia
J7	Dominica	6Y	Jamaica	9Y	Trinidad & Tobago
HI	Dominican Republic	JY	Jordan	CX	Uruguay
HC	Ecuador	EL	Liberia	YV	Venezuela

## RECIPROCAL OPERATING AGREEMENTS

The United States has negotiated reciprocal operating agreements with many other countries. Amateurs may operate within the territory of these countries according to the terms of the agreement after first obtaining a permit from the host country. The sole exception is Canada: amateurs with valid U.S. or Canadian licenses may operate within the other country's territory without obtaining a permit. They must, of course, abide by all the terms of the reciprocal operating agreement.

The following is a current list of countries having reciprocal operating agreements with the United States:

V2	Antigua & Barbuda	DA-DR	Germany	YN	Nicaragua
LU	Argentina	SV	Greece	LA	Norway
VK	Australia	J3	Grenada	HP	Panama
OE	Austria	TG	Guatemala	P2	Papua New Guinea
C6	Bahamas	8R	Guyana	ZP	Paraguay
8P	Barbados	HH	Haiti	OA	Peru
ON	Belgium	HR	Honduras	DU	Philippines
V3	Belize	VS6	Hong Kong	CT	Portugal
CP	Bolivia	TF	Iceland	J6	St. Lucia
A2	Botswana	VU	India	J8	St. Vincent/Grenadines
PY	Brazil	YB-YH	Indonesia	S7	Seychelles
VE	Canada	EI	Ireland	9L	Sierra Leone
CE	Chile	4X,4Z	Israel	H4	Solomon Is.
HK	Colombia	I	Italy	ZR,ZS	South Africa
TI	Costa Rica	6Y	Jamaica	EA-EH	Spain
5B	Cyprus	JA-JS	Japan	PZ	Surinam
OZ	Denmark/Greenland	JY	Jordan	SJ-SM	Sweden
J7	Dominica	T3	Kiribati	HB	Switzerland
HI	Dominican Republic	9K	Kuwait	HS	Thailand
HC	Ecuador	EL	Liberia	9Y	Trinidad & Tobago
YS	El Salvador	LX	Luxembourg	T2	Tuvalu
V6	Federated States of Micronesia	XE	Mexico	G	United Kingdom
		3A	Monaco	CX	Uruguay
3D2	Fiji	PA-PI	Netherlands	YV	Venezuela
OH	Finland	PJ	Netherlands Antilles	YU	Yugoslavia
F	France & Territories	ZL	New Zealand		



# 6 METER BEACONS

This list has been prepared by Harry Schools KA3B and Ray Clark K5ZMS for SMIRK, the Six Meter International Radio Klub. Please send all update information and Klub membership inquiries to K5ZMS.

I = Intermittent beacon. C = Continuous beacon.

FREQ.	CALL	OPERATION	LOCATION	GRID	NOTES
35.810	VK6RO	I	Western Australia		3W, 6 el Yagi
41.750	VK6RO	I	Western Australia		8W, 6 el Yagi
45.250	Ch. 1	I	New Zealand TV video		
46.250	Ch. 0	I	Australian TV video		
48.250	Ch. E2	I	European/African TV video		
49.750	Ch. RI	I	European/Asian TV video		
50.000	CE3BXK	I	Santiago, Chile		
50.000	GB3BUX	C	Sheffield Univ., Buxton, England	IO93BF	15W, Turnstile
50.005	ZS2SIX	C	Rep. of South Africa	KF25	25W, dipole N/S
50.005	H44HIR		Honaria, Solomon Islands	QI00	
50.007.2	KØGUV	C	Park Rapids, Minnesota, USA	EN26	8W, Halo 35'
50.010	VE7SIX	C	Kaleden, BC, Canada	DN09	130W, Swiss Quad
50.010	JA2IGY	C	Mie (near Nagoya), Japan	PM84	10W, ground plane
50.013	P29BPL	C	Port Moresby, Papua New Guinea	QI30	30W, dipole
50.015	SZ2DH	I	Athens, Greece	KM18MM	10W, 5 el Yagi
50.015	PJ4B	C	Bonaire, Netherlands Antilles		
50.017	JE6ZIH	C	Miyazaki, Japan	PM51	10W, 2X/Squalo
50.018	ZS3VHF	C	Rep. of South Africa	JG87	50W, ground plane
50.020	GB3SIX	C	Anglesey, England	IO73TJ	25W, 3 el Yagi
50.020	CX1CCC	C	Uruguay	GF15	5W, ground plane
50.025	6Y5RC	C	Kingston, Jamaica	FK17MX	40W, 3 el Yagi
50.026.5	ZS6PW	I	Rep. of South Africa	KG44	
50.028	JA7ZMA	C	Fukushima, Japan	QM07	10W, 6 el Yagi
50.030	CTØWW	C	Joao Pesdueira, Portugal	IN61GE	40W, dipole
50.032.5	ZD8VHF	C	Ascension Island	II22	50W, JVL vertical
50.033	LU8YYO	C	Argentina		
50.035	ZB2VFH	C	Gibraltar		
50.035	ZS3VHF	C	Rep. of South Africa		60W, vertical
50.039	FY7THF	C	Kourou, French Guyana	GJ35	100W, ground plane
50.040	CX8BE	I	Montevideo, Uruguay	GF15	10W, 4 el Yagi
50.040	SV1SIX		Greece		
50.045	YV5/DL3ZM	C	Caracas, Venezuela	FK60	10W, 6 el Yagi
50.045	OX3VHF	C	Simiutaq, Greenland	GP60QQ	20W, ground plane
50.050	GB3NHQ	C	Potters Bar, England	IO91VQ	15W, dipoles
50.050	ZS6DN	C	Irene, Rep. of South Africa	KG44	
50.055	ZS6LN	I	Rep. of South Africa	KG46	
52.056	VK8VF	C	Darwin, Australia	PH57	20W, horizontal
50.057.5	TF3SIX	C	Iceland	HP94CC	50W, vertical
50.060	GB3RMK	C	Rosemarkie, England	IO77UO	20W, dipole
50.060	K4TOR	C	Birmingham, Alabama, USA	EM63OM	1W, dipole 60'
50.060	WA8ONQ	C	Middletown, Ohio, USA	EM79TM	2W, Turnstile 50'
50.060	W5VAS	C	Slidell, Louisiana, USA	EM50	0.5W, vertical 310
50.060.2	PY2AA	C	Sao Paulo, Brazil	GG66QK	25W, ground plane
50.061	K1NFE	C	Burlington, Connecticut, USA	FN31MS	15W, Turnstile 70'
50.062	W3VD	C	Laurel, Maryland, USA	FM19NC	10W, vertical 40'
50.062.5	GB3NGI	C	Londonderry, England	IO65	18W, dipole
50.063	N4PZ	C	Sarasota, Florida, USA	EL87SF	0.4W, whip 70'
50.063	K6MYC	I	Kona, Hawaii, USA	BK29	10W, M sq. Yagi
50.064	WD7Z	C	Yucca, Arizona, USA	DM24MV	75W, Squalo 60'
50.065	WA1OJB	C	Bowdoin, Maine, USA	FN54	13W, J-pole 15'
50.065	NB3O/1	C	Rhode Island, USA	FN41	100W, 5 el Yagi
50.065	W9KFO	C	Eaton, Indiana, USA	EN70HH	1.5W
50.065	KAØCDN	C	Aurora, Colorado, USA	DM79PS	20W, Halo 30'
50.065	WØIJR	C	Aurora, Colorado, USA	DM79PS	20W, Halo 30'
50.065	KL7WE	I	Anchorage, Alaska, USA	BP51	1.5W, 3 el Yagi
50.065.5	GB4HXJ	C	St. Helier, England	IN89	10W, Halo
50.066	VK6RPR	C	Perth, Australia	OF78	20W, horizontal
50.067	WB8IGY	I	Loveland, Ohio, USA	EM79UG	2W, vertical 100'
50.067	N7DB	I	Boring, Oregon, USA	CN85TM	10W, Halo 30'
50.067		C	Brazzaville, Congo AM Station		
50.068	W7US	C	Tucson, Arizona, USA		
50.068.5	W4RFR	C	Nashville, Tennessee, USA	EM66WA	2W
50.069	W4HHK	C	Collierville, Tennessee, USA	EM55HA	1W, dipole 30'
50.069	K6FV	C	Woodside, California, USA	CM87UL	100W, various 30'
50.070	WØBJ	C	North Platte, Nebraska, USA	DN91NC	5W, Turnstile 12'

# 6 METER BEACONS

FREQ.	CALL	OPERATION	LOCATION	GRID	NOTES
50.070	KA4VEY	C	Harvest, Alabama, USA	EM64VV	10W, vertical
50.070	KB4UPI	C	Birmingham, Alabama, USA	EM63OM	4W, dipole 25'
50.070	KØHTF	C	Des Moines, Iowa, USA	EN31KC	3W, inverted V
50.070	N4LTA	C	Spartanburg, S.Carolina, USA	EM94AX	10W, Halo 50'
50.070	WA7ECY	C	Troutdale, Oregon, USA	CN85SM	10W, Squalo 30'
50.070	WBØCGH	C	Lewisville, Texas, USA	EM13MC	1.5W, Halo 180'
50.070	WB4GJG	I	Danville, Virginia, USA	FM06HM	1W, Ringo 70'
50.071	WØVD	C	Joplin, Missouri, USA	EM27VD	12W, dipole 20'
50.072	WA2YTM	C	Canandaigua, New York, USA	FN12IT	15W, Turnstile
50.072	KW2T	C	Palmyra, New York, USA	FN13	0.25W, Squalo 30'
50.074	WB5DSH	C	Oklahoma City, Oklahoma, USA	EM15FL	30W, Halo 40'
50.075	K7IHZ	I	Mesa, Arizona, USA	DM43BM	20W, Squalo
50.075	PY2AMI	C	Americana, Brazil	GG67IF	10W, ground plane
50.075	NL7XM/Z	C	Staten Island, New York	FN20WN	10W, vertical
50.075	KP4EKG	I	Bayamon, Puerto Rico, USA	FK68	10W, vertical 35'
50.075	VS6SIX	C	Hong Kong	OL72	30W, ground plane
50.077	NØLL	C	Smith Center, Kansas, USA	EM09OS	21W, 2 Halos 30'
50.077	N5JM	I	New Orleans, Louisiana, USA	EL49XW	3W, vertical 50'
50.077.5	T12NA	C	San Jose, Costa Rica	EK70	20W, dipole
50.079	W6SKC/7	C	Nogales, Arizona, USA	DM41ML	5-80W, horizontal 15'
50.080	KH6JJJ	I	Honolulu, Hawaii, USA	BL11CI	5W, 3 el Yagi
50.080	WB4OOJ	C	Tampa, Florida, USA	EL87SU	10W, vertical 25'
50.080	W1AW	I	ARRL, Newington, CT, USA	FN31PQ	50W, 6 el Yagi 60'
50.082	HC8SIX	C	Galapagos Islands	EL59	4W, vertical
50.085	9H1SIX	C	Malta	JM75FV	25W, 5 el Yagi
50.086	LU1MA	C	Mendoza, Argentina	FF57	10W, 2 el Quad
50.086	K7NV	I	Pahrump, Nevada, USA	DM16	
50.086	VE2STL	C	Val Belair, Quebec, Canada	FN46	1.5W, dipole
50.086	VP2MO	I	Plymouth, Montserrat	FK86	10W, 6 el Yagi 50'
50.090	KJ6BZ	C	Jonnston Island	AK56	10W, 6 el Yagi
50.092	W5GTP	I	New Iberia, Louisiana	EM40CA	30W, 3 el Yagi 30'
50.100	HC2FG	C	Guayaquil, Ecuador	FI07	8W, J-pole
50.100	VP5D	C	Turks & Caicos Islands	FL31	6W, AR6 Ringo 60'
50.100	KG6DX	I	Latte Heights, Guam	QK23	40W, 3 el Yagi
50.110	JA2IGY	C	Mie (near Nagoya), Japan	PM84	10W, ground plane
50.110	A61XL	I	United Arab Emirates	LL74	50W, 6 el Yagi
50.120	4S7EA	I	Sri Lanka	MJ97	50W, 6 el Yagi
50.321	ZS5SIX	C	Pietermaritzburg, RSA	KG50	10W, Halo
50.490	JG1ZGW	C	Tokyo, Japan	PM95	10W, dipole
50.500	5B4CY	C	Zyghi, Cyprus	KM64HT	15W, ground plane
50.740	Ch.1 Audio	I	Auckland, New Zealand	WBFM	
50.750	Ch.1 Audio	I	Kaukapunake, New Zealand	WBFM	
50.760	Ch.1 Audio	I	Waukapunake, New Zealand	WBFM	
50.904	ZS1STB	C	Republic of South Africa	KF05	25W, ground plane
51.020	ZL1UHF	C	Auckland, New Zealand	RF73	25W, dipole
51.030	ZL2MHB	C	Napier, New Zealand	RF80	10W, vertical
51.225	ZL2VHTC		Inglewood, New Zealand	RF70	30W
51.670	Ch.0 Audio	I	Brisbane, Qld, Australia		FM
51.740	Ch.0 Audio	I	Wagga, NSW, Australia		FM
51.760	Ch.0 Audio	I	Melbourne, Vic, Australia		FM
51.910	Ch.0 Audio	I	Brisbane, Qld, Australia		FM
52.100	ZK2SIX	C	Niue	AH50	
52.200	VK8VF	C	Darwin, Australia	PH57	20W, horizontal
52.250	ZL2VHM	C	Manawatu, New Zealand	RE79	8W
52.310	ZL3MHF	C	Christchurch, New Zealand	RE66	50W, vertical
52.320	VK6RTT	C	Wickham, Australia	OG89	25W, J-pole
52.325	VK2RHV	C	Newcastle, Australia	QF57	20W, horizontal
52.330	VK3RGG	C	Geelong, Australia	QF21	10W, horizontal
52.345	VK4ABP	C	Longreach, Australia	QG26	10W, vertical
52.370	VK7RST	C	Hobart, Australia	QE37	20W, horizontal
52.420	VK2RSY	C	Sydney, Australia	QF56	25W, Turnstile
52.425	VK2RGB	C	Gunnedah, Australia	QF59	5W, horizontal
52.440	VK4RTL	C	Townsville, Australia	QH30	10W, 1/4 vertical
52.450	VK5VF	C	Adelaide, Australia	PF95	30W, Turnstile
52.460	VK6RPH	C	Perth, Australia	OF78	20W, horizontal
52.465	VK6RTW	C	Albany, Australia	OF84	10W, horizontal
52.470	VK7RNT	C	Launceston, Australia	QE38	10W, horizontal
52.485	VK8RAS	C	Alice Springs, Australia	PG66	25W, horizontal
52.490	ZL2SIX	C	Blenheim, New Zealand	RE68	10W, vertical
52.510	ZL2MHF	C	Upper Hut, New Zealand	RE78	4W, vertical

# 10 METER BEACONS

<u>FREQ.</u>	<u>CALL</u>	<u>OPERATION</u>	<u>LOCATION</u>	<u>NOTES</u>
28.175	VE3TEN	C	Ottawa, Ontario, Canada	10W, ground plane
28.191	VE6YF		Edmonton, AB Canada	10W
28.195	1Y4M		Bologna, Italy	20W, 5/8 ground plane
28.200	GB3SX	C	Crowborough, England, U.K.	8W, dipole
28.201	LU8ED		Buenos Aires, Argentina	5W
28.202	KE5GY	I	Arlington, Texas, USA	5W, vertical
28.2025	ZS5VHF		Natal, Rep. of South Africa	5W, ground plane
28.204	DL0IGI	C	Mt. Predigtstuhl, West Germany	100W, vertical dipole
28.205	KA3OEM		Meadville, Pennsylvania, USA	27W, Yagi west
28.206	KJ4X		Pickens, South Carolina, USA	2W, vertical
28.2075	W8FL	C	Venice, Florida, USA	10W, vertical
28.208	WA1IOB	C	Marlborough, Massachusetts, USA	75W, vertical
28.209	NX20		Staten Is., New York, USA	10W, ground plane
28.210	3B8MS	C	Mauritius	ground plane
28.210	K4KMZ	I	Elizabethtown, Kentucky, USA	20W, vertical
28.210	KC4DPC	C	Wilmington, North Carolina, USA	4W, dipole
28.212	EA6RCM		Palma de Mallorca, Spain	4W, 5 el NNE
28.2125	ZD9GI	C	Gough Is., South Atlantic	ground plane
28.216	GB3RAL	C	Slough, Berkshire, U.K.	20W, ground plane
28.2175	W8UR		Mackinac Is., Michigan, USA	1/2 W, ground plane
28.2175	WB9VMY	C	Calumet, Oklahoma, USA	2W, dipole
28.2195	LU4XS		Tierra del Fuego, Argentina	
28.220	5B4CY	C	Zygi, Cyprus	26W, ground plane
28.221	PY2GOB		Sao Paulo, Brazil	15W, vertical
28.222	W9UXO	C	Lake Bluff, Illinois, USA	10W, ground plane
28.2225	HG2BHA	C	Tapolca, Hungary	10W, ground plane
28.225	PY2AMI	C	Sao Paulo, Brazil	5W, dipole
28.225	N6TWX	I	Grass Valley, California, USA	30W, 3 el Yagi
28.225	KW7Y		Marysville, Washington, USA	4W, vertical
28.2275	EA6AU	C	Mallorca, Balearic Is., Spain	10W, 5/8 ground plane
28.230	ZL2MHF	C	Mt. Climie, New Zealand	50W, vertical dipole
28.232	W7JPI	C	Sonoita, Arizona, USA	5W, 3 el Yagi NE
28.233	KD4EC	C	Jupiter, Florida, USA	7W, ground plane
28.235	VP9BA	C	Hamilton, Bermuda	10W, ground plane
28.2375	LA5TEN	C	Oslo, Norway	10W, 5/8 ground plane
28.2405	5Z4ERR	C	Kiambu, Kenya	
28.245	A92C		Bahrain	dipole, NW/SE
28.2455	ZS1CTB	C	Capetown, Rep. of South Africa	20W, 1/4 vertical
28.2475	EA2HB	I	San Sebastian, Spain	6W, ground plane
28.248	K1BZ	C	Belfast, Maine, USA	5W, vertical dipole
28.2495	EA3JA		Barcelona, Spain	
28.250	W3SV	C	Elverson, Pennsylvania, USA	10W, vertical
28.250	K0HTF	C	Des Moines, Iowa, USA	2W, ground plane
28.250	Z21ANB	C	Bulawayo, Zimbabwe	15W, ground plane
28.2505	4N3ZHK		Yugoslavia	1W, vertical
28.252	WB4JHS	I	Florissant, Missouri, USA	7W, vertical
28.252	WJ7X	C	Bellevue, Washington, USA	5W, vertical
28.2525	OH2TEN		Finland	
28.255	LU1UG		Gral Pico, Argentina	5W, ground plane
28.2575	DK0TEN	C	Konstanz, West Germany	40W, ground plane
28.259	WB9FVR	C	Pembroke Pines, Florida, USA	1W, dipole
28.260	VK5WI	C	Adelaide, SA, Australia	10W, ground plane
28.262	VK2RSY	C	Sydney, NSW, Australia	25W, ground plane
28.264	VK6RWA	C	Perth, WA, Australia	
28.266	VK6RTW	C	Albany, WA, Australia	
28.266	KB4UPI	C	Birmingham, Alabama, USA	20W, 1/4 vertical
28.2685	W9KFO	I	Eaton, Indiana, USA	0.75W, vertical
28.270	ZS6PW	C	Pretoria, Rep. of South Africa	10W, 3 el Yagi
28.270	VK4RTL	C	Townsville, QLD, Australia	
28.2725	9L1FTN	I	Freetown, Sierra Leone	10W, vertical dipole
28.2745	ZS1LA	C	Stillbay, Rep. of South Africa	20W, 3 el Yagi NW
28.275	AL7GQ	C	Denver, Colorado, USA	1W, loop



# 10 METER BEACONS

<u>FREQ.</u>	<u>CALL</u>	<u>OPERATION</u>	<u>LOCATION</u>	<u>NOTES</u>
28.2755	N6RDX	I	Stockton, California, USA	20W, 3 el Yagi
28.277	DF0AAB	C	Kiel, West Germany	10W, ground plane
28.280	LU8EB		Buenos Aires, Argentina	5W
28.282	VEIMUF	C	Fredrickton, NB, Canada	0.5W, dipole
28.282	VE2HOT		Beaconsfield, PQ, Canada	5W, vertical dipole
28.284	VP8ADE	C	Adelaide Is., Antarctica	8W, vert. beam to G-land
28.286	KE2DI		Rochester, New York, USA	2W, vertical dipole
28.286	KK4M	C	Las Vegas, Nevada, USA	5W, vertical
28.287	W80MV		Asheville, North Carolina, USA	5W, ground plane
28.287	H44SI	C	Honaria, Solomon Is.	15W
28.288	W2NZH	I	Moorestown, New Jersey, USA	3W, ground plane
28.290	SK5TEN		Sweden	
28.290	VS6TEN	C	Mt. Matilda, Hong Kong	10W, vertical
28.292	ZD8HF		Ascension Island	
28.2925	LU2FFV		San Jorge, Argentina	5W, ground plane
28.295	WC8E	I	Cincinnati, Ohio, USA	10W, vertical
28.296	W3VD	C	Laurel, Maryland, USA	1.5W, vertical dipole
28.297	WA4DJS	I	Ft. Lauderdale, Florida, USA	30W, ground plane
28.301	KF4MS	C	St. Petersburg, Florida, USA	5W
28.3025	PT7AAC		Fortaleza, Brazil	5W, ground plane
28.306	PT8AA		Rio Branco, Brazil	5W, ground plane
28.315	ZS6DN	C	Irene, Rep. of South Africa	100W, vertical
28.888	W6IRT		N. Hollywood, California, USA	5W, ground plane
28.992	DL0ANN		Nuremberg, West Germany	20MW, delta loop

Send any additions, corrections, or deletions to Joe Gumino – K2OLG, 303 Old Stage Road, Spotswood, NJ 08884, USA.

# TELEGRAPH CODES

Continental Code	Morse Code
Used in ham radio	Used on land lines in United States and Canada
<p>A .- B -.-. C -.-. D -.-. E . F .-.. G --. H .-.. I .. J -.-. K -.-. L -.-. M --. N -.. O --- P -.-. Q -.-. R .-.. S --- T - U ..- V ...- W -.-. X -.-. Y -.-. Z ---.</p> <p>There are no space letters in the Continental Code</p>	<p>A .- B -.-. C -.-. D -.-. E . F .-.. G --. H .-.. I .. J -.-. K -.-. L -.-. M --. N -.. O --- P -.-. Q -.-. R .-.. S --- T - U ..- V ...- W -.-. X -.-. Y -.-. Z ---.</p> <p>C, O, R, Y, Z, and &amp; are composed of dots and spaces T is a short dash L is a longer dash Zero (0) is usually abbreviated to T</p>
<p>Figures</p> <p>1 .-.-.- 2 .-.-.- 3 .-.-.- 4 .-.-.- 5 .-.-.- 6 .-.-.- 7 .-.-.- 8 .-.-.- 9 .-.-.- 0 .-.-.-</p>	<p>Figures</p> <p>1 .-.-.- 2 .-.-.- 3 .-.-.- 4 .-.-.- 5 .-.-.- 6 .-.-.- 7 .-.-.- 8 .-.-.- 9 .-.-.- 0 .-.-.-</p>
<p>Punctuation</p> <p>(.) .-.-.- (?) .-.-.- (:) .-.-.- (;) .-.-.- (-) .-.-.- (!) None at present (") .-.-.- (') .-.-.- (` ) .-.-.- (~ ) .-.-.-</p>	<p>Punctuation</p> <p>(.) .-.-.- (?) .-.-.- (:) .-.-.- (;) .-.-.- (-) .-.-.- (!) .-.-.- (") .-.-.- (') .-.-.- (` ) .-.-.- (~ ) .-.-.-</p>

## Emergency Signal

In a dire emergency situation  
use **SOS** by code, **MAYDAY** by voice.

## GORDON WEST RADIO SCHOOL

Prefix 0-823

08731X No Code Novice \$49.95  
Includes 1 textbook, 2 novice theory tapes, 2 technical tapes, the latest FCC rule book and VHF/ UHF/HF band limits charts.

087328 21-Day Novice \$39.95  
Includes 1 textbook, 2 stereo code learning tapes, sample 5 wpm Novice code test, and over \$50 in radio manufacturers' discount coupons.

087301 Novice Code \$39.95  
Includes 6 cassette tapes that make it easy to learn the code from scratch.

087336 2-Week Tech \$34.95  
This Technician course includes 2 theory tapes and 1 illustrated textbook.

087360 Complete Gen. \$69.95  
Includes 6 code tapes, 4 theory tapes, and 2 textbooks. Ideal for upgrade from Novice to General.

087352 General Code \$39.95  
Includes 6 tapes for speed building from 5 to 13 wpm.

087344 General Theory \$34.95  
A fully illustrated textbook is included with 2 cassette theory tapes to cover FCC element 3B.

087379 Adv. Theory \$44.95  
Includes 4 tapes and 1 illustrated textbook.

087409 Complete Extra \$69.95  
Includes 4 theory tapes, 1 textbook and 6 code tapes (13 to 22 wpm).

087387 Extra Theory \$44.95  
Includes 4 theory tapes and 1 illustrated textbook for Extra class theory.

087395 Extra Code \$44.95  
Includes 6 tapes for speed building from 13 to 22 wpm for the Extra code exam.

Please send me the items that I have indicated above. I have enclosed my check/money order for \$\_\_\_\_\_.

(Please add sales tax in CA, DC, IL, KY, VA, MA, NJ, NY, PA, TN & Canada, and \$3.00 for postage and handling for U.S. shipments and \$7.00 for all shipments outside the U.S.)

Or call and charge on your credit card. American Express, MasterCard and Visa accepted. Please be sure to include shipping instructions. Prepayment required and must be in U.S. funds.

DRZW 1092

## RADIO AMATEUR callbook

P.O. Box 2013 Lakewood, NJ 08701  
1-908-905-2961 (Phone) 1-908-363-0338 (Fax)

# INTERNATIONAL POSTAL RATES

These are the postal rates in effect at the time of this issue.

	United States and Possessions	Canada	Mexico	All Other Countries
First Class Air Postcard (QSL)	\$0.19	\$0.30	\$0.30	\$0.40
Surface Postcard (QSL) (1 Ounce)				\$0.35
Additional Ounces up to 12 ozs.	\$0.23	\$0.22	\$0.23	
First Class Air Letter (1 Ounce)	\$0.29	\$0.40	\$0.45	\$0.95
Surface Letter (1 Ounce)				\$0.70*
Aerogramme				\$0.45

\* Over 1 up to 2 oz. \$0.95; over 2 up to 3 oz. \$1.20; over 3 up to 4 oz. \$1.45

\*\* Over 1 up to 2 oz. \$0.63; over 2 up to 3 oz. \$0.86; over 3 up to 4 oz. \$1.09

\*\*\* Over 1 up to 1½ oz. \$0.55; over 1½ up to 2 oz. \$0.65; over 2 up to 3 oz. \$0.90; over 3 up to 4 oz. \$1.15

**INTERNATIONAL REPLY COUPONS (IRC's)** may be purchased at U.S. Post Offices for \$.95 each. As of December 1991, newly issued IRC coupons allow for Air Mail return. EACH new coupon may be exchanged in any country of the Universal Postal Union for one or more postage stamps representing the minimum postage for a priority item or an unregistered letter sent by Air to any country. The following multiple IRC's are needed for Air Mail reply ONLY if old-issue coupons are being used.

Afghanistan.....5	Ecuador.....3	Liberia.....5	St. Pierre & Miquelon Is. (Fr.)...2
Aland Is. (Fin.).....2	Egypt.....5	Libya.....2	St. Thomas & Principe.....3
Albania.....4	El Salvador.....3	Liechtenstein.....2	St. Vincent.....3
Algeria.....2	Equatorial Guinea.....2	Luxembourg.....2	Samoa, Western.....4
Andorra.....2	Ethiopia.....3		San Marino.....3
Angola.....3		Macao.....3	Saudi Arabia.....3
Anguilla.....3	Faroe Is. (Den.).....2	Madeira Is. (Port.).....2	Scotland (U.K.).....2
Antigua.....2	Falkland Is. (Br.).....3	Madagascar.....3	Senegal.....2
Argentina.....3	Fiji Is. ....4	Malawi.....6	Seychelles.....3
Ascension Is. ....3	Finland.....2	Malaysia, West.....5	Sierra Leone.....3
Australia.....4	France.....2	Mali.....2	Singapore.....5
Austria.....2	French Guiana.....2	Malta.....2	Solomon Is. ....2
Azores Is. (Port.).....2	French Polynesia.....2	Martinique (Fr.).....2	South Africa, Rep. of.....5
		Mauritania.....2	South Yemen.....5
Bahama Is. ....2	Gabon.....2	Mauritius Is. ....3	Spain.....2
Bahrain.....5	Gambia, The.....4	Mexico.....2	Sri Lanka.....5
Balearic Is. (Spain).....2	Germany.....2	Montserrat.....3	Sudan.....3
Bangladesh.....2	Ghana.....3	Morocco.....2	Surinam.....2
Barbados Is. ....3	Gibraltar (Br.).....2	Mozambique.....3	Swaziland.....5
Belgium.....2	Great Britain.....2	Myanmar.....4	Sweden.....2
Belize.....2	Greece.....2		Switzerland.....2
Benin.....2	Greenland (Den.).....2	Namibia.....5	Syria.....3
Bermuda Is. ....2	Grenada.....4	Nauru.....2	
Bolivia.....2	Guadeloupe.....2	Nepal.....5	Taiwan.....3
Botswana.....5	Guatemala.....2	Netherlands.....2	Tanzania.....4
Brazil.....2	Guinea-Bissau.....2	Netherlands Antilles.....2	Thailand.....3
Brunei.....4	Guinea.....2	New Caledonia.....2	Togo.....2
Bulgaria.....3	Guyana.....4	New Zealand.....3	Tonga Is. ....3
Burkina Faso.....2		Nicaragua.....4	Trinidad & Tobago Is. ....2
Burundi.....3	Haiti.....5	Niger.....2	Tristan da Cunha Is. ....3
	Honduras.....3	Nigeria.....3	Tunisia.....2
Cambodia.....3	Hong Kong.....5	Northern Ireland (U.K.).....2	Turkey.....3
Cameroon.....2	Hungary.....2	Norway.....2	Turks & Caicos Is. ....2
Canada.....2		Oman.....4	Tuvalu.....5
Canary Is. (Spain).....2	Iceland.....2		
Cape Verde.....3	India.....3	Pakistan.....2	Uganda.....4
Cayman Is. ....3	Indonesia.....3	Panama.....2	United Arab Emirates.....4
Central African Republic.....2	Iran.....4	Papua New Guinea.....3	Uruguay.....2
Ceuta & Melilla (Spain).....2	Iraq.....3	Paraguay.....3	
Chad.....2	Ireland (Eire).....3	Peru.....3	Vanuatu.....2
China.....3	Israel.....3	Philippines.....3	Vatican City.....2
Colombia.....3	Italy.....2	Poland.....2	Venezuela.....2
Comoros.....3	Ivory Coast.....2	Portugal.....2	Vietnam.....2
Congo.....2		Qatar.....4	Virgin Is. (Br.).....2
Costa Rica.....2	Japan.....2		
Crete (Greece).....2	Jordan.....3	Reunion Is. (Fr.).....2	Wales (U.K.).....2
Cuba.....4	Kenya.....4	Romania.....3	West Irian (Indonesia).....3
Cyprus.....4	Kiribati.....5	Rwanda.....2	
Czechoslovakia.....2	Korea.....3		Yugoslavia.....3
	Kuwait.....4	St. Helena Is. (Br.).....3	
Denmark.....2	Lebanon.....3	St. Kitts-Nevis.....3	Zaire.....2
Djibouti.....2	Lesotho.....5	St. Lucia.....3	Zambia.....2
Dominica.....2			Zanzibar (Tanzania).....4
Dominican Republic.....2			Zimbabwe.....5



# STANDARD TIME THROUGHOUT THE WORLD

The standard time system is based on the theoretical division of the surface of the globe into 24 zones, each of 15° of longitude. The initial zone is the one which has as its central meridian the Greenwich Meridian and with the meridians 7° 30' E. and 7° 30' W. as its eastern and western limits. Time in this zone is called Universal Coordinated Time, or UTC. Places to the east of Greenwich are ahead of UTC, while places to the west are behind UTC. Not all countries follow the International Time Zone System, but will use the time of some principal city as a standard or will have no standard time at all.

Reference - "Standard Time Chart of the World" No. 5192, published by the U.S. Navy Hydrographic Office, Washington D.C.

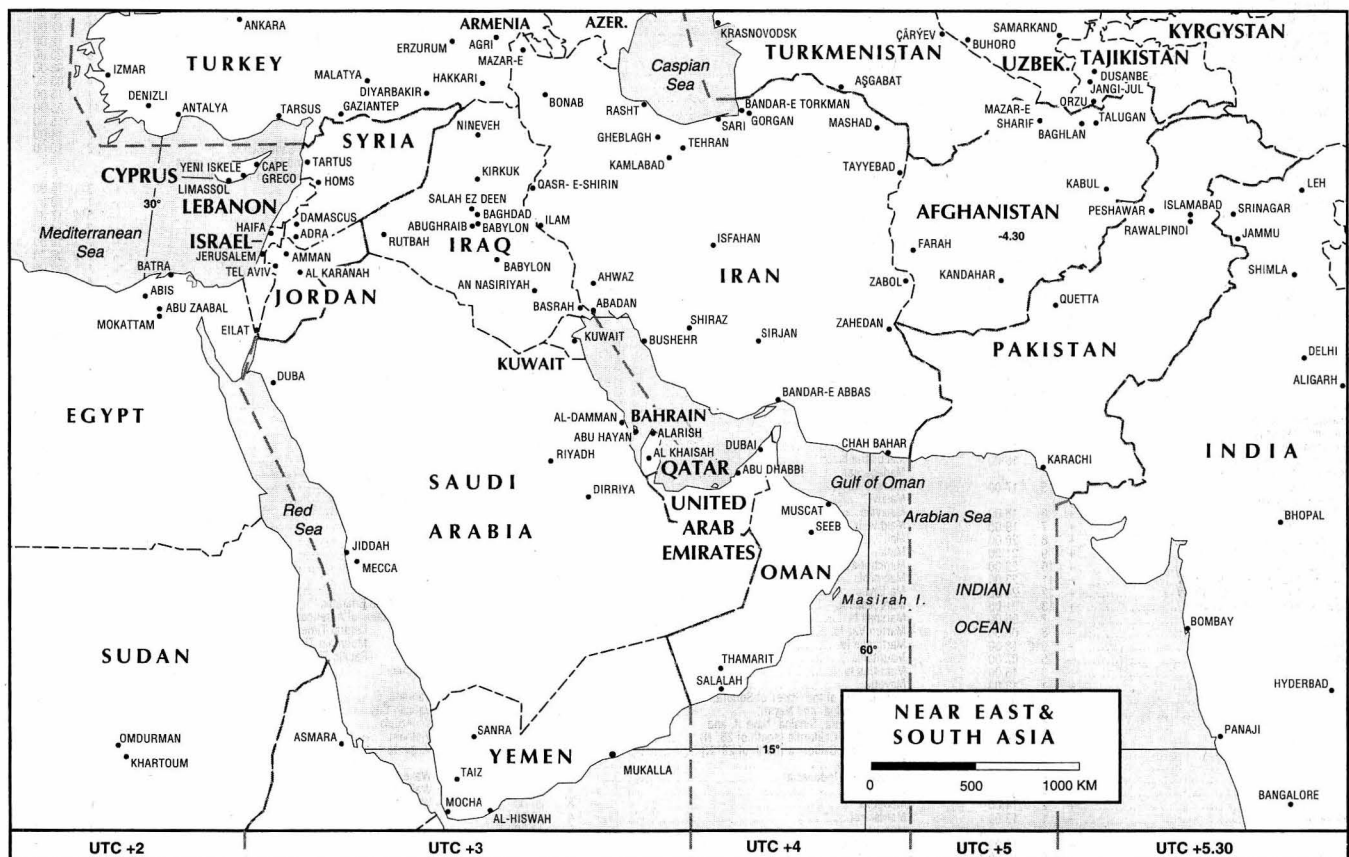
The theoretical system described is applied, in a strict sense, only in oceanic regions. On land or on groups of islands the system is applied with certain local deviations made necessary by frontiers or to permit an entire island group to have the same time zone. The time used in each country, whether it is the time of the corresponding zone or a modified time, is fixed by law and is called legal time, or more generally, standard time.

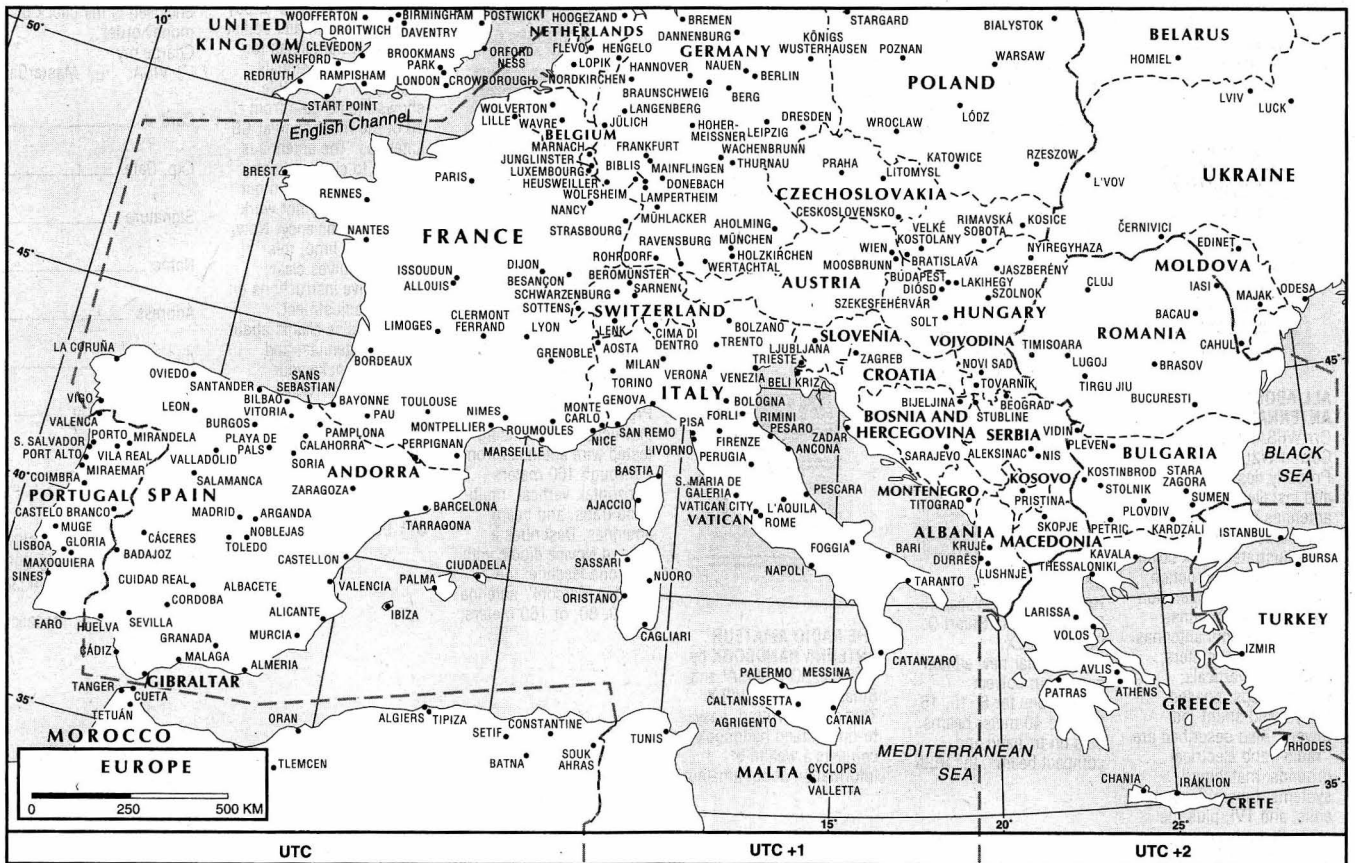
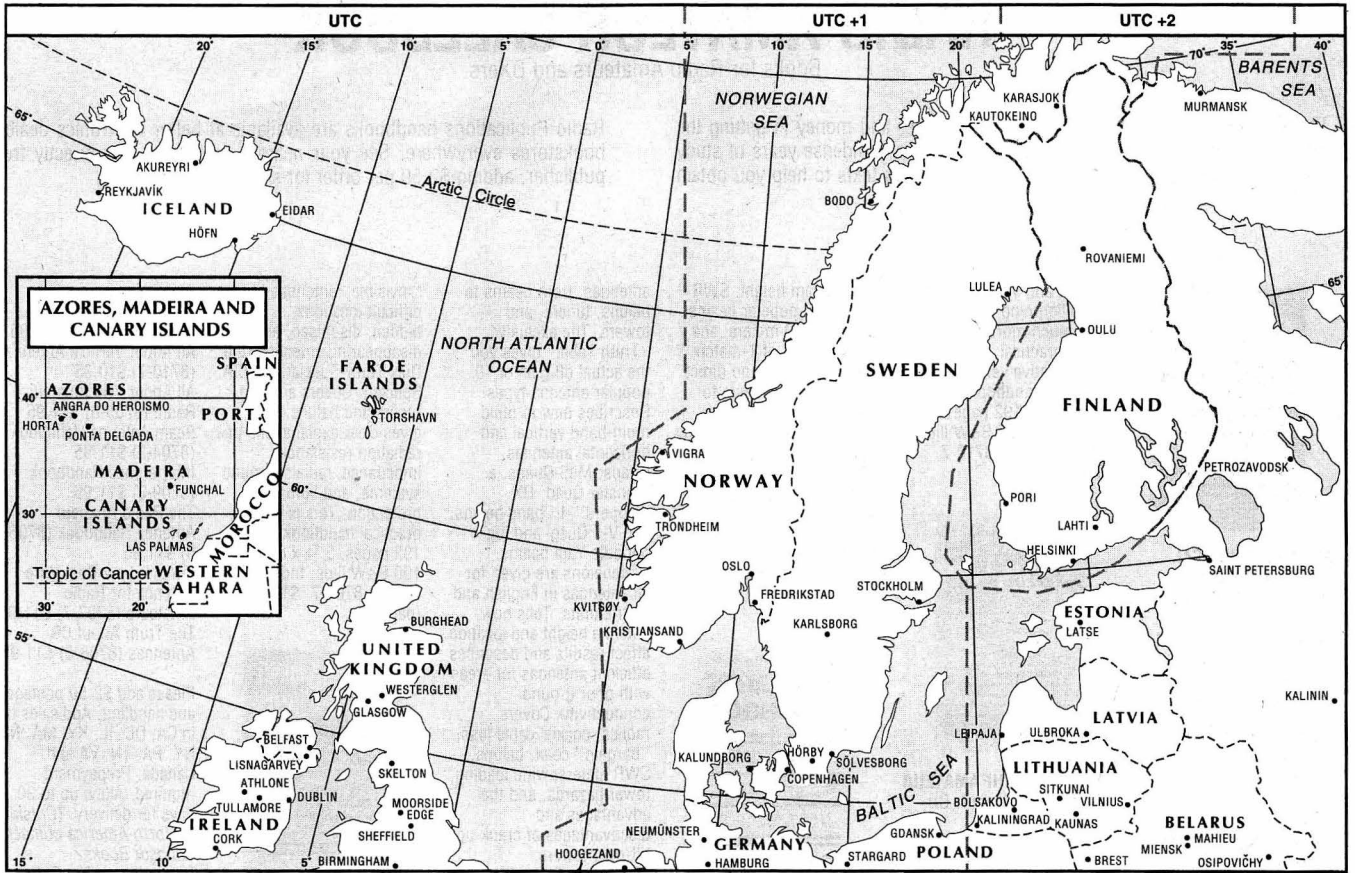
Another deviation from this theoretical system is that certain countries, for economic reasons, modify their legal time for part of the year (especially in summer) by advancing it an hour or another fraction of time. Where such deviations are maintained on a year-around basis, the time kept is considered to be standard time.

Country	Standard or local time	
	Hours fast or slow of UTC	Time at 12:00 hrs. UTC
Afghanistan	+ 4 1/2	16 30
Aland Is.	+ 2	14 00
Alaska	- 9	03 00
Aleutian Is.	- 10	02 00
Albania	+ 1	13 00
Algeria	+ 0	12 00
Amsterdam Is.	+ 5	17 00
Andaman Is.	+ 5 1/2	17 30
Andorra	+ 1	13 00
Angola	+ 1	13 00
Anguilla	- 4	08 00
Antigua	- 4	08 00
Argentina	- 3	09 00
Aruba Is.	- 4	08 00
Ascension Is.	- 0	12 00
Auckland Is.	+ 12	24 00
Australia: Western Australia	+ 8	20 00
Northern Territory, South Australia	+ 9 1/2	21 30
New South Wales, Queensland, and Victoria	+ 10	22 00
Austria	+ 1	13 00
Azores Is.	- 1	11 00
Bahamas	- 5	07 00
Bahrain	+ 3	15 00
Baker Is. (U.S.)	+ 0	12 00
Baleares Is.	+ 1	13 00
Bangladesh	+ 6	18 00
Barbados	- 4	08 00
Belgium	+ 1	13 00
Belize	- 6	06 00
Benin	+ 1	13 00
Bermuda Is.	+ 4	16 00
Bhutan	+ 6 1/2	18 30
Bolivia	- 4	08 00
Bonaire	- 4	08 00
Borneo (Indonesia)	+ 8	20 00
Bosnia & Herzegovina	+ 1	13 00
Botswana	+ 2	14 00
Brazil: East of 52° 30' W. (approx.)	- 3	09 00
Amazonas, Matto Grosso	- 4	08 00
Acre Territory	- 5	07 00
British Isles	- 0	12 00
Brunel	+ 8	20 00
Bulgaria	+ 2	14 00
Burkina Faso	+ 0	12 00
Burundi	+ 2	14 00
Calcos Is.	- 4	08 00
Cambodia	- 7	19 00
Cameroon	- 1	13 00
Campbell Is.	+ 12	24 00
Canada: Belle Isle, Labrador, and Newfoundland	- 3 1/2	08 30
Anticosti Is., Cape Breton Is.,		
Magdalen Is., New Brunswick,		
Nova Scotia, Prince Edward Is.,		
Quebec (E of 68° W), and Sable Is.	- 4	08 00
Melville Peninsula (east), Ontario		
(E of 90° W), Quebec (W of 68°),		
and Southampton Is.	- 5	07 00
Manitoba, Ontario (W of 90° W),		
Melville Peninsula (west), and		
N.W. Territories (east)	- 6	06 00
Alberta, Saskatchewan, and		
N.W. Territories (middle)	- 7	05 00
British Columbia and N.W.		
Territories (west)	- 8	04 00
Yukon	- 8	04 00
Arctic Is. (No definite standard time used.)		
Canary Is.	- 0	12 00
Cape Verde	- 1	11 00
Caroline Is.	+ 9	21 00
Truk	+ 10	22 00
Ponape	+ 11	23 00
Cayman Is.	- 5	07 00
Celebes Is. (Indonesia)	+ 8	20 00
Central African Republic	+ 1	13 00
Chad	+ 1	13 00
Chagos Is.	+ 5	17 00
Chatham Is.	+ 12 3/4	00 45
Chile	- 4	08 00
China	+ 8	20 00
Christmas Is.	+ 7	19 00
C.I.S.: Karelo-Finnish, Belarus,		
Ukraine, Moldova, and		
European Russia	+ 3	15 00
Armenia and Azerbaijan	+ 4	16 00
Kazakh, Uzbek, Turkmenistan,		
and Tajikistan	+ 5	17 00
Kyrgyzstan & West		
Siberian region	+ 6	18 00
approx. 82° 30' to 97° 30' W	+ 7	19 00
Buryat, East Siberian region	+ 8	20 00
approx. 112° 30' to 127° 30' W	+ 9	21 00
Kuri Is., Sakhalin Is.	+ 10	22 00
approx. 142° 30' to 158° 30' W	+ 11	23 00
approx. 157° 30' to 172° 30' W	+ 12	24 00
approx. 172° 30' W to coast	+ 13	01 00
Clipperton Is.	- 7	05 00
Cocos Is.	- 8	06 00
Cocos (Keeling) Is.	+ 6 1/2	18 30
Colombia	- 5	07 00
Comoros	+ 3	15 00
Congo	+ 1	13 00
Cook Is.	- 10 1/2	01 30
Corsica	+ 1	13 00
Costa Rica	- 6	06 00
Croatia	+ 2	14 00
Crozet Is.	+ 3	15 00
Cuba	- 5	07 00
Curacao	- 4	08 00
Cyprus	+ 2	14 00
Czechoslovakia	+ 1	13 00
Denmark	+ 1	13 00
Diego Garcia	+ 5	17 00
Djibouti	+ 3	15 00
Dominica	- 4	08 00
Dominican Republic	- 4	08 00
Easter Is.	- 7	05 00
Ecuador	- 5	07 00

Country	Standard or local time	
	Hours fast or slow of UTC	Time at 12:00 hrs. UTC
Egypt	+ 2	14 00
El Salvador	- 6	06 00
Endorbury Is. (Kiribati)	- 11	01 00
Equatorial Guinea	+ 1	13 00
Estonia	+ 3	15 00
Ethiopia	+ 3	15 00
Falkland Is.	- 4	08 00
Fanning Is.	- 10	02 00
Faroes	- 0	12 00
Fernando de Noronha Is.	- 2	10 00
Fiji Is.	+ 12	24 00
Finland	+ 2	14 00
France	+ 1	13 00
French Guiana	- 3	09 00
French Polynesia	- 10	02 00
Gahon	+ 1	13 00
Galapagos Is.	- 5	07 00
Gambia, The	- 0	12 00
Georgia	+ 4	16 00
Germany (East and West)	+ 1	13 00
Ghana	- 0	12 00
Gibraltar	+ 1	13 00
Gilbert Is. (Kiribati)	+ 12	24 00
Gough Is.	- 0	12 00
Greece	+ 2	14 00
Greenland: Scoresbysund Area	- 2	10 00
Central	- 3	09 00
Thule Area	- 4	08 00
Grenada	- 4	08 00
Guadeloupe	- 4	08 00
Guam	+ 10	22 00
Guantanamo Bay	- 5	07 00
Guatemala	- 6	06 00
Guinea	- 0	12 00
Guinea-Bissau	- 0	12 00
Guyana	- 3	09 00
Haiti	- 5	07 00
Hawaii	- 10	02 00
Heard Is.	+ 5	17 00
Honduras	- 6	06 00
Hong Kong	+ 8	20 00
Howland Is. (U.S.)	+ 1	13 00
Hungary	+ 1	13 00
Iceland	- 0	12 00
India	+ 5 1/2	17 30
Iran	+ 3 1/2	15 30
Ireland	+ 0	12 00
Israel	+ 2	14 00
Italy	+ 1	13 00
Ivory Coast	- 0	12 00
Jamaica	- 5	07 00
Jan Mayen Is.	- 1	11 00
Japan	+ 9	21 00
Jarvis Is.	- 10	02 00
Java (Indonesia)	+ 7	19 00
Johnston Is.	- 10	02 00
Jordan	+ 2	14 00
Juan Fernandez Is. (Chile)	+ 4	08 00
Kanton Is. (Kiribati)	- 11	01 00
Kenya	+ 3	15 00
Kerguelen Is.	+ 5	17 00
Kermadec Is.	+ 12	24 00
Korea	+ 9	21 00
Kuwait	+ 3	15 00
Laccadive Is.	+ 5 1/2	17 30
Laos	+ 7	19 00
Latvia	+ 3	15 00
Lebanon	+ 2	14 00
Lesotho	+ 2	14 00
Liberia	- 0	12 00
Libya	+ 2	14 00
Liechtenstein	+ 1	13 00
Line Is. (Kiribati)	- 10	02 00
Lithuania	+ 3	15 00
Lord Howe Is.	+ 10 1/2	22 30
Luxembourg	+ 1	13 00
Macao	+ 8	20 00
Macquarie Is.	+ 11	23 00
Madagascar	+ 3	15 00
Madeira Is.	- 0	12 00
Malawi	+ 2	14 00
Malaysia	+ 7 1/2	10 30
Maldives Is.	+ 5	17 00
Mali	- 0	12 00
Malta	+ 1	13 00
Manchuria	- 8	20 00
Marshall Is.	- 11	01 00
Martin Vaz Is.	- 10	02 00
Martique Is.	- 4	08 00
Mauritania	- 0	12 00
Mauritius Is.	+ 3	15 00
Mayotte	+ 3	15 00
Mexico: East of the States of Sonora,		
Sinaloa, and Nayarit	- 0	06 00
Sonora, Sinaloa, Nayarit, and		
Baja California (south of 28° N)	- 7	05 00
Baja California (north of 28° N)	- 8	04 00
Midway Is.	- 11	01 00
Molucca Is. (Indonesia)	+ 0	12 00
Monaco	+ 1	13 00
Mongolia	+ 8	20 00
Montserrat	- 4	08 00
Morocco	- 0	12 00
Mozambique	+ 2	14 00
Myanmar	+ 6 1/2	18 30
Namibia	+ 2	14 00
Nauru	+ 11 1/2	23 30
Navassa Is.	+ 5	17 00
Nepal	+ 5 1/2	17 45
Netherlands	+ 1	13 00

Country	Standard or local time	
	Hours fast or slow of UTC	Time at 12:00 hrs. UTC
New Caledonia	+ 11	23 00
New Zealand	+ 12	24 00
Nicaragua	- 6	06 00
Nicaragua	+ 5 1/2	17 30
Niger	- 1	13 00
Nigeria	+ 1	13 00
Niue	- 11	01 00
Norfolk Is.	+ 11 1/2	23 30
Norway	+ 1	13 00
Ogasawara Is.	+ 9	21 00
Oman	+ 4	16 00
Pakistan	+ 5	17 00
Palmyra Is.	- 10	02 00
Panama	- 5	07 00
Papua New Guinea	+ 10	22 00
Paraguay	- 4	08 00
Peru	- 5	07 00
Philippines	+ 8	20 00
Phoenix Is. (Kiribati)	- 11	01 00
Pitcairn Is.	- 8 1/2	03 30
Poland	+ 1	13 00
Portugal	- 0	12 00
Pribilof Is.	- 11	01 00
Prince Edward & Marion Is.	+ 3	15 00
Providence Is.	- 5	07 00
Puerto Rico	- 4	08 00
Qatar	+ 3	15 00
Reunion Is.	+ 4	16 00
Revilla Gigeo Is.	- 7	05 00
Romania	+ 2	14 00
Rwanda	+ 2	14 00
Ryukyu Is.	+ 9	21 00
Sabah (Malaysia)	+ 8	20 00
St. Helena Is.	- 0	12 00
St. Kitts, Nevis	- 4	08 00
St. Lucia	- 4	08 00
St. Paul Is.	+ 5	17 00
St. Pierre & Miquelon Is.	- 3	09 00
St. Vincent	- 4	08 00
Salpan	+ 10	22 00
Samoa Is.	- 11	01 00
San Andres Is.	- 5	07 00
San Marino	+ 1	13 00
Sao Tome & Principe Is.	- 0	12 00
Sarawak (Malaysia)	+ 8	20 00
Sardinia	+ 1	13 00
Saudi Arabia	+ 3	15 00
Senegal	- 0	12 00
Seychelles Is.	+ 4	16 00
Sicily	+ 1	13 00
Sierra Leone	- 0	12 00
Singapore	+ 8	20 00
Sint Eustatius	+ 4	08 00
Sint Maarten	- 4	08 00
Slovenia	+ 1	13 00
Solomon Is.	+ 11	23 00
Somali Republic	+ 3	15 00
South Africa	+ 2	14 00
South Georgia Is., South Sandwich Is.	- 2	10 00
South Shetland Is., South Orkney Is.		
(No definite standard time used.)		
South Yemen	+ 3	15 00
Spain	+ 1	13 00
Sri Lanka	+ 5 1/2	17 30
Sudan	+ 2	14 00
Sumatra (Indonesia)	+ 7	19 00
Surinam	- 3 1/2	08 30
Svalbard Is.	+ 1	13 00
Swan Is.	- 6	06 00
Swaziland	+ 2	14 00
Sweden	+ 1	13 00
Switzerland	+ 1	13 00
Syria	+ 2	14 00
Taiwan	+ 8	20 00
Tanzania	+ 3	15 00
Tasmania (Australia)	+ 10	22 00
Thailand	+ 7	19 00
Timor Is. (Indonesia)	+ 8	20 00
Togo	- 0	12 00
Tonga	+ 13	01 00
Transkei	+ 2	14 00
Trinidad Is.	- 2	10 00
Trinidad & Tobago	- 4	08 00
Tristan da Cunha Is.	- 0	12 00
Tromelin Is.	+ 4	16 00
Tunisia	+ 1	13 00
Turkey	+ 3	15 00
Turks Is.	- 4	08 00
Tuvalu	+ 12	24 00
Uganda	+ 3	15 00
United Arab Emirates	+ 4	16 00
United States of America: Eastern Time	- 5	07 00
Central Time	- 6	06 00
Mountain Time	- 7	05 00
Pacific Time	- 8	04 00
Uruguay	- 3	09 00
Vanuatu	+ 11	23 00
Vatican City	+ 1	13 00
Venezuela	- 4	08 00
Vietnam	+ 7	19 00
Virgin Is.	- 4	08 00
Wake Is.	+ 12	24 00
Wallis & Futuna Is.	+ 12	24 00
Western Sahara	- 0	12 00
West Iran (Indonesia)	+ 9	21 00
West Indies	- 4	08 00
Yemen	+ 3	15 00
Yugoslavia	+ 1	13 00
Zaire	+ 2	14 00
Zambia	+ 2	14 00
Zanzibar (Tanzania)	+ 3	15 00
Zimbabwe	+ 2	14 00





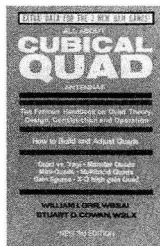


# RADIO AMATEUR CALLBOOK

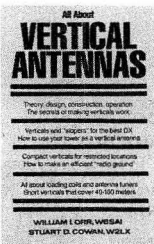
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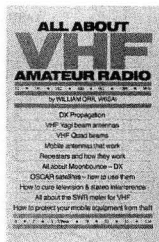


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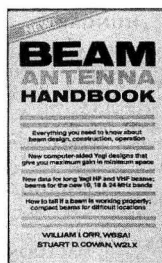


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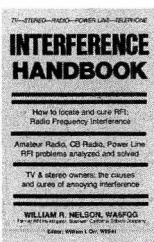


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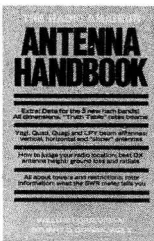


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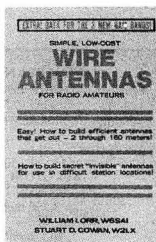


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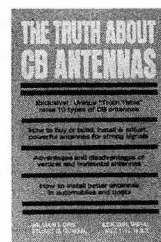
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